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A

VOYAGE

TOWARDS

THE SOUTH POLE,

AND

ROUND THE WORLD,

IN 1772, 1773, 1774, AND 1775.

BOOK III.

FROM ULIETEA TO NEW ZEALAND.

CHAP. I.

PASSAGE FROM ULIETEA TO THE FRIENDLY ISLES; WITH A DESCRIPTION OF SEVERAL ISLANDS THAT WERE DISCOVERED, AND THE INCIDENTS WHICH HAPPENED IN THAT TRACK.

On the 6th, being the day after leaving Ulietea, at eleven o'clock A. M. we saw land bearing N. W., which, upon a nearer approach, we found to be a low reef island about four leagues in compass, and of a circular form. It is composed of several small patches connected together by breakers, the largest lying on the N. E. part. This is Howe island, discovered by Captain Wallis, who, I think, sent his boat to examine it; and, if I have not been misinformed, found a channel through, within the reef, near the N. W. part. The inhabitants of Ulietea speak of an uninhabited island, about this situation, called by them Mopeha, to which they go at certain seasons for turtle. Perhaps this may be the same; as we saw no signs of

inhabitants upon it. Its latitude is 16° 46′ South; longitude 154° 8′ West.

From this day to the 16th, we met with nothing remarkable, and our course was West southerly; the winds variable from the North round by the East to S. W. attended with cloudy, rainy, unsettled weather, and a southerly swell. We generally brought to, or stood upon a wind, during night; and in the day made all the sail we could. About half an hour after sun-rise this morning, land was seen from the top-mast head, bearing N. N. E. We immediately altered the course and steering for it, found it to be another reef island, composed of five or six woody islets, connected together by sand banks and breakers, inclosing a lake, into which we could see no entrance. We ranged the West and N. W. coasts, from its southern to its northern extremity, which is about two leagues; and so near the shore, that at one time we could see the rocks under us; yet we found no anchorage, nor saw we any signs of inhabitants. There were plenty of various kinds of birds, and the coast seemed to abound with fish. The situation of this isle is not very distant from that assigned by Mr. Dalrymple for La Sagitaria, discovered by Quiros; but, by the description the discoverer has given of it, it cannot be the same. For this reason, I looked upon it as a new discovery, and named it Palmerston Island, in honour of Lord Palmerston, one of the Lords of the Admiralty. It is situated in latitude 18° 4′ South, longitude 163° 10′ West.

At four o'clock in the afternoon we left this isle, and resumed our course to the W. by S. with a fine steady gale easterly, till noon on the 20th, at which time, being in latitude 18° 50′, longitude 168° 52′, we thought we saw land to S. S. W. and hauled up for it accordingly. But two hours after, we discovered our mistake, and resumed our course W. by S. Soon after we saw land from the mast-head in the same direction; and, as we drew nearer, found it to

be an island which, at five o'clock, bore West, distant five leagues. Here we spent the night plying under the top-sails; and, at day-break next morning, bore away, steering for the northern point, and ranging the West coast at the distance of one mile, till near noon. Then, perceiving some people on the shore, and landing seeming to be easy, we brought to, and hoisted out two boats, with which I put off to the land, accompanied by some of the officers and gentlemen. As we drew near the shore, some of the inhabitants, who were on the rocks, retired to the woods, to meet us, as we supposed; and we afterwards found our conjectures right. We landed with ease in a small creek, and took post on a high rock to prevent a surprise. Here we displayed our colours, and Mr. Forster and his party began to collect plants, &c. The coast was so over-run with woods, bushes, plants, stones, &c. that we could not see forty yards round us. I took two men, and with them entered a kind of chasm, which opened a way into the woods. We had not gone far before we heard the natives approaching; upon which I called to Mr. Forster to retire to the party, as I did likewise. We had no sooner joined, than the islanders appeared at the entrance of a chasm not a stone's-throw from us. We began to speak, and make all the friendly signs we could think of to them, which they answered by menaces; and one of two men, who were advanced before the rest, threw a stone, which struck Mr. Sparrman on the arm. Upon this two musquets were fired, without order, which made them all retire under cover of the woods; and we saw them no more.

After waiting some little time, and till we were satisfied nothing was to be done here, the country being so over-run with bushes, that it was hardly possible to come to parly with them, we embarked and proceeded down along shore, in hopes of meeting with better success in another place. After ranging the coast for some miles without seeing a living soul,

or any convenient landing-place, we at length came before a small beach, on which lay four canoes. Here we landed by means of a little creek, formed by the flat rocks before it, with a view of just looking at the canoes, and to leave some medals, nails, &c. in them; for not a soul was to be seen. The situation of this place was to us worse than the former. A flat rock lay next the sea; behind it a narrow stone beech; this was bounded by a perpendicular rocky cliff of unequal height, whose top was covered with shrubs; two deep and narrow chasms in the cliff seemed to open a communication into the country. In, or before one of these, lay the four canoes which we were going to look at; but in the doing of this, I saw we should be exposed to an attack from the natives, if there were any, without being in a situation proper for defence. To prevent this, as much as could be, and to secure a retreat in case of an attack, I ordered the men to be drawn up upon the rock, from whence they had a view of the heights; and only myself, and four of the gentlemen, went up to the canoes. We had been there but a few minutes, before the natives, I cannot say how many, rushed down the chasm out of the wood upon us. The endeavours we used to bring them to a parly, were to no purpose; for they came with the ferocity of wild boars, and threw their darts. Two or three musquets, dischgared in the air, did not hinder one of them from advancing still farther, and throwing another dart, or rather a spear, which passed close over my shoulder. His courage would have cost him his life, had not my musquet missed fire; for I was not five paces from him, when he threw his spear, and had resolved to shoot him to save myself. I was glad afterwards that it happened as it did. At this instant, our men on the rock began to fire at others who appeared on the heights, which abated the ardour of the party we were engaged with, and gave us time to join our people, when I caused the firing to cease.

The last discharge sent all the islanders to the woods, from whence they did not return so long as we remained. We did not know that any were hurt. It was remarkable, that when I joined our party, I tried my musquet in the air, and it went off as well as a piece could do. Seeing no good was to be got with these people, or at the isle, as having no port, we returned on board, and having hoisted in the boats, made sail to W. S. W. I had forgot to mention, in its proper order, that having put ashore a little before we came to this last place, three or four of us went upon the cliffs, where we found the country, as before, nothing but coral rocks, all over-run with bushes; so that it was hardly possible to penetrate into it, and we embarked again with intent to return directly on board, till we saw the canoes; being directed to the place by the opinion of some of us, who thought they heard some people.

The conduct and aspect of these islanders occasioned my naming it Savage Island. It is situated in the latitude 19° 1′ South, longitude 169° 37′ West. It is about eleven leagues in circuit; of a round form, and good height; and hath deep waters close to its shores. All the sea-coast, and as far inland as we could see, is wholly covered with trees, shrubs, &c. amongst which were some cocoa-nut trees; but what the interior parts may produce, we know not. To judge of the whole garment by the skirts, it cannot produce much; for so much as we saw of it consisted wholly of coral rocks, all over-run with wood and bushes. Not a bit of soil was to be seen; the rocks alone supplying the trees with humidity. If these coral rocks were first formed in the sea by animals, how came they thrown up to such a height? Has this island been raised by an earthquake? Or has the sea receded from it? Some philosophers have attempted to account for the formation of low isles, such as are in this sea; but I do not know that any thing has been said of high islands, or such as I have

been speaking of. In this island, not only the loose rocks which cover the surface, but the cliffs which bound the shores, are of coral stone, which the continual beating of the sea has formed into a variety of curious caverns, some of them very large: the roof or rock over them being supported by pillars, which the foaming waves have formed into a multitude of shapes, and made more curious than the caverns themselves. In one, we saw light was admitted through a hole at the top; in another place, we observed that the whole roof of one of these caverns had sunk in, and formed a kind of valley above, which lay considerably below the circumjacent rocks.

I can say but little of the inhabitants, who I believe, are not numerous. They seemed to be stout, well-made men, were naked, except round the waists, and some of them had their faces, breast, and thighs painted black. The canoes were precisely like those of Amsterdam; with the addition of a little rising like a gunwale on each side of the open part; and had some carving about them, which shewed that these people are full as ingenious. Both these islanders and their canoes, agree very well with the descriptions M. de Bougainville has given of those he saw off the Isle of Navigators, which lies nearly under the same meridian.

After leaving Savage Island, we continued to steer W. S. W. with a fine easterly trade-wind, till the 24th in the evening, when, judging ourselves not far from Rotterdam, we brought to, and spent the night plying under the top-sails. At day-break, next morning, we bore away West; and, soon after, saw a string of islands extending from S. S. W. by the West to N. N. W. The wind being at N. E. we hauled to N. W. with a view of discovering more distinctly the isles in that quarter; but, presently after, we discovered a reef of rocks a-head, extending on each bow farther than we could see. As we could not weather them, it became necessary to tack and bear up to

to look for a passage that way. At noon, ·rnmost island bore S. W.; distant four miles. f this isle were three others, all connected .eakers, which we were not sure did not join to e we had seen in the morning, as some were observed in the intermediate space. Some islands were also seen to the West of those four; but Rotterdam was not yet in sight. Latitude 20° 23′ S. longitude 174° 6′ West. During the whole afternoon, we had little wind: so that, at sunset, the southernmost isle bore W. N. W., distant five miles; and some breakers, we had seen to the South, bore now S. S. W. half W. Soon after it fell calm, and we were left to the mercy of a great easterly swell; which, however, happened to have no great effect upon the ship. The calm continued till four o'clock the next morning, when it was succeeded by a breeze from the South. At day-light, perceiving a likelihood of a passage between the islands to the North, and the breakers to the South, we stretched in West, and soon after saw more islands, both to the S. W. and N. W. but the passage seemed open and clear. Upon drawing near the islands, we sounded, and found forty-five and forty fathoms, a clear sandy bottom. I was now quite easy, since it was in our power to anchor, in case of a calm; or to spend the night, if we found no passage. Towards noon, some canoes came off to us from one of the isles, having two or three people in each; who advanced boldly along-side, and exchanged some cocoa-nuts, and shaddocks for small nails. They pointed out to us Anamocka or Rotterdam; an advantage we derived from knowing the proper names. They likewise gave us the names of some of the other isles, and invited us much to go to theirs, which they called Cornango. The breeze freshening, we left them astern, and steered for Anamocka; meeting with a clear passage, in which we found unequal sounding, from forty to nine fathoms,

depending, I believe, in a great measure, on our distance from the islands which form it.

As we drew near the south end of Rotterdam, or Anamocka, we were met by a number of canoes, laden with fruit and roots; but, as I did not shorten sail, we had but little traffic with them. The people in one canoe enquired for me by name; a proof that these people have an intercourse with those of Amsterdam. They importuned us much to go towards their coast, letting us know, as we understood them, that we might anchor there. This was on the S. W. side of the island, where the coast seemed to be sheltered from the South and S. E. winds; but as the day was far spent, I could not attempt to go in there, as it would have been necessary to have sent first a boat in to examine it. I therefore stood for the north side of the island, where we anchored about three-fourths of a mile from shore; the extremes of it bearing S. 88° East to S. W. a cove with a sandy beach at the bottom of it S. 50° East.

CHAP. II.

RECEPTION AT ANAMOCKA; A ROBBERY AND ITS CONSEQUENCES, WITH A VARIETY OF OTHER INCIDENTS. DEPARTURE FROM THE ISLAND. A SAILING CANOE DESCRIBED. SOME OBSERVATIONS ON THE NAVIGATION OF THESE ISLANDERS. A DESCRIPTION OF THE ISLAND, AND OF THOSE IN THE NEIGHBOURHOOD, WITH SOME ACCOUNT OF THE INHABITANTS, AND NAUTICAL REMARKS.

BEFORE we had well got to an anchor, the natives came off from all parts in canoes, bringing with them yams and shaddocks, which they exchanged for small nails and old rags. One man taking a vast liking to our lead and line, got hold of it, and, in spite of all the threats I could make use of, cut the line with a stone; but a discharge of small shot made him return it. Early in the morning, I went ashore, with Mr. Gilbert, to look for fresh water. We landed in the cove above-mentioned, and were received with great courtesy by the natives. After I had distributed some presents amongst them, I asked for water, and was conducted to a pond of it that was brackish, about three-fourths of a mile from the landing-place; which I suppose to be the same that Tasman watered at. In the mean time, the people in the boat had laden her with fruit and roots, which the natives had brought down, and exchanged for nails and beads. On our return to the ship, I found the same sort of traffic carrying on there. After breakfast, I went ashore with two boats to trade with the people, accompanied by several of the gentlemen, and ordered the launch to follow with casks to be filled with water. The natives assisted us to roll them to and from the pond; and a nail or a bead was the expence of their labour. Fruit and roots, especially shaddocks and yams, were brought down in such plenty, that the two boats were

laden, sent off, cleared, and laden a second time, before noon; by which time also the launch had got a full supply of water, and the botanical and shooting parties had all come in, except the surgeon, for whom we could not wait, as the tide was ebbing fast out of the cove; consequently he was left behind. As there is no getting into the cove with a boat, from between half ebb to half flood, we could get off no water in the afternoon. However, there is a very good landing-place without it, near the southern point, where boats can get ashore at all times of the tide; here some of the officers landed after dinner, where they found the surgeon, who had been robbed of his gun. Having come down to the shore some time after the boats had put off, he got a canoe to bring him on board; but as he was getting into her, a fellow snatched hold of the gun, and ran off with it. After that no one would carry him to the ship, and they would have stripped him, as he imagined, had he not presented a tooth-pick case, which they, no doubt, thought was a little gun. As soon as I heard of this, I landed at the place above-mentioned, and the few natives who were there fled at my approach. After landing, I went in search of the officers, whom I found in the cove, where we had been in the morning, with a good many of the natives about them. No step had been taken to recover the gun, nor did I think proper to take any; but in this I was wrong. The easy manner of obtaining this gun, which they now, no doubt, thought secure in their possession, encouraged them to proceed in these tricks, as will soon appear. The alarm the natives had caught being soon over, they carried fruit, &c. to the boats, which got pretty well laden before night, when we all returned on board.

Early in the morning of the 28th, Lieutenant Clerke, with the Master and fourteen or fifteen men, went on shore in the launch for water. I did intend

to have followed in another boat myself, but rather unluckily deferred it till after breakfast. The launch was no sooner landed than the natives gathered about her, behaving in so rude a manner, that the officers were in some doubt if they should land the casks; but, as they expected me on shore soon, they ventured, and, with difficulty, got them filled, and into the boat again. In the doing of this, Mr. Clerke's gun was snatched from him, and carried off; as were also some of the cooper's tools; and several of the people were stripped of one thing or another. All this was done, as it were, by stealth; for they laid hold of nothing by main force. I landed just as the launch was ready to put off; and the natives, who were pretty numerous on the beach, as soon as they saw me, fled; so that I suspected something had happened. However, I prevailed on many to stay, and Mr. Clerke came, and informed me of all the preceding circumstances. I quickly came to a resolution to oblige them to make restitution; and, for this purpose, ordered all the marines to be armed, and sent on shore. Mr. Forster and his party being gone into the country, I ordered two or three guns to be fired from the ship, in order to alarm him; not knowing how the natives might act on this occasion. These orders being given, I sent all the boats off but one, with which I stayed, having a good many of the natives about me, who behaved with their usual courtesy. I made them so sensible of my intention, that long before the marines came, Mr. Clerke's musquet was brought, but they used many excuses to divert me from insisting on the other. At length Mr. Edgecumbe arriving with the marines, this alarmed them so much, that some of them fled. The first step I took was to seize on two large double-sailing canoes, which were in the cove. One fellow making resistance, I fired some small shot at him, and sent him limping off. The natives being now convinced that I was in earnest, all fled; but on my calling to them,

many returned; and, presently after, the other musquet was brought, and laid at my feet. That moment I ordered the canoes to be restored, to show them on what account they were detained. The other things we had lost being of less value, I was the more indifferent about them. By this time the launch was ashore for another turn of water, and we were permitted to fill the casks without any one daring to come near us; except one man, who had befriended us during the whole affair, and seemed to disapprove of the conduct of his countrymen.

On my returning from the pond to the cove, I found a good many people collected together, from whom we understood that the man I had fired at was dead. This story I treated as improbable, and addressed a man, who seemed of some consequence, for the restitution of a cooper's adze we had lost in the morning. He immediately sent away two men, as I thought, for it; but I soon found that we had greatly mistaken each other; for, instead of the adze, they brought the wounded man, stretched out on a board, and laid him down by me, to all appearance dead. I was much moved at the sight; but soon saw my mistake, and that he was only wounded in the hand and thigh. I therefore desired he might be carried out of the sun, and sent for the surgeon to dress his wounds. In the mean time, I addressed several people for the adze; for as I had now nothing else to do, I determined to have it. The one I applied the most to, was an elderly woman, who had always a great deal to say to me, from my first landing; but, on this occasion, she gave her tongue full scope. I understood but little of her eloquence; and all I could gather from her arguments was, that it was mean in me to insist on the return of so trifling a thing. But when she found I was determined, she and three or four more women went away; and soon after the adze was brought me, but I saw her no more. This I was sorry for, as I wanted to make her a present, in re-

turn for the part she had taken in all our transactions, private as well as public. For I was no sooner returned from the pond, the first time I landed, than this old lady presented to me a girl, giving me to understand she was at my service. Miss, who probably had received her instructions, wanted, as a preliminary article, a spike-nail, or a shirt, neither of which I had to give her, and soon made them sensible of my poverty. I thought, by that means, to have come off with flying colours; but I was mistaken; for they gave me to understand I might retire with her on credit. On my declining this proposal, the old lady began to argue with me; and then abuse me. Though I comprehended little of what she said, her actions were expressive enough, and showed that her words were to this effect, sneering in my face, saying, what sort of a man are you, thus to refuse the embraces of so fine a young woman? For the girl certainly did not want beauty; which, however, I could better withstand, than the abuses of this worthy matron, and therefore hastened into the boat. They wanted me to take the young lady aboard; but this could not be done, as I had given strict orders, before I went ashore, to suffer no woman, on any pretence whatever, to come into the ship, for reasons which I shall mention in another place.

As soon as the surgeon got ashore, he dressed the man's wounds, and bled him; and was of opinion that he was in no sort of danger, as the shot had done little more than penetrate the skin. In the operation, some poultice being wanting, the surgeon asked for ripe plantains; but they brought sugar-cane, and having chewed it to a pulp, gave it him to apply to the wound. This being of a more balsamic nature than the other, proves that these people have some knowledge of simples. As soon as the man's wounds were dressed, I made him a present, which his master, or at least the man who owned the canoe, took most probably to himself. Matters being thus settled, apparently to

to the satisfaction of all parties, we repaired on board to dinner, where I found a good supply of fruit and roots, and therefore gave orders to get every thing in readiness to sail.

I now was informed of a circumstance which was observed on board: several canoes being at the ship, when the great guns were fired in the morning, they all retired, but one man, who was bailing the water out of his canoe, which lay along-side, directly under the guns. When the first was fired, he just looked up, and then, quite unconcerned, continued his work; nor had the second gun any other effect upon him; he did not stir till the water was all out of his canoe, when he paddled leisurely off. This man had several times been observed to take fruit and roots out of other canoes, and sell them to us. If the owners did not willingly part with them, he took them by force; by which he obtained the appellation of custom-house officer. One time, after he had been collecting tribute, he happened to be lying along-side of a sailing canoe which was on board. One of her people seeing him look another way, and his attention otherwise engaged, took the opportunity of stealing somewhat out of his canoe; they then put off, and set their sail; but the man, perceiving the trick they had played him, darted after them, and having soon got on board their canoe, beat him who had taken his things, and not only brought back his own but many other articles which he took from them. This man had likewise been observed making collections on shore at the trading-place. I remembered to have seen him there; and, on account of his gathering tribute, took him to be a man of consequence, and was going to make him a present; but some of their people would not let me; saying he was no *Areeke*, (that is, chief). He had his hair always powdered with some kind of white dust.

As we had no wind to sail this afternoon, a party of us went ashore in the evening. We found the na-

tives every where courteous and obliging; so that, had we made a longer stay, it is probable we should have had no more reason to complain of their conduct. While I was now on shore, I got the names of twenty islands which lie between the N. W. and N. E. some of them in sight. Two of them, which lie most to the West, viz. Amattafoa and Oghao, are remarkable on account of their great height. In Amattafoa, which is the westernmost, we judged there was a volcano, by the continual column of smoke we saw daily ascending from the middle of it.

Both Mr. Cooper and myself being on shore at noon, Mr. Wales could not wind up the watch at the usual time; and, as we did not come on board till late in the afternoon, it was forgotten till it was down. This circumstance was of no consequence, as Mr. Wales had had several altitudes of the sun at this place, before it went down; and also had opportunities of taking some after.

At day-break on the 29th, having got under sail with a light breeze at West, we stood to the North for the two high islands; but the wind, scanting upon us, carried us in amongst the low isles and shoals; so that we had to ply to clear them. This gave time for a great many canoes, from all parts, to get up with us. The people in them brought for traffic various articles; some roots, fruits and fowls, but of the latter not many. They took in exchange small nails, and pieces of any kinds of cloth. I believe, before they went away, they stripped the most of our people of the few clothes the ladies of Otaheite had left them; for the passion for curiosities was as great as ever. Having got clear of the low isles, we made a stretch to the South, and did but fetch a little to windward of the south end of Anamocka; so that we got little by this day's plying. Here we spent the night, making short boards over that space with which we made ourselves acquainted the preceding day.

On the 30th at day-break stretched out for Amat-

tafoa, with a gentle breeze at W. S. W. Day no sooner dawned than we saw canoes coming from all parts. Their traffic was much the same as it had been the day before, or rather better; for out of one canoe I got two pigs, which were scarce articles here. At four in the afternoon, we drew near the island of Amattafoa, and passed between it and Oghao, the channel being two miles broad, safe and without soundings. While we were in the passage, we had little wind and calms. This gave time for a large sailing double canoe, which had been following us all the day, as well as some others with paddles, to come up with us.

I had now an opportunity to verify a thing I was before in doubt about; which was, whether or no some of these canoes did not, in changing tacks, only shift the sail, and so proceed with that end foremost which before was the stern; the one we now saw wrought in this manner; the sail is latteen, extended to a latteen yard above, and to a boom at the foot; in one word, it is like a whole mizzen, supposing the whole foot to be extended to a boom. The yard is slung nearly in the middle, or upon an equipoise. When they change tacks, they throw the vessel up in the wind, ease off the sheet, and bring the heel or tack-end of the yard to the other end of the boat, and the sheet in like manner: there are notches, or sockets, at each end of the vessel in which the end of the yard fixes. In short, they work just as those do at the Ladrone Islands, according to Mr. Walter's description.* When they want to sail large, or before the wind, the yard is taken out of the socket and squared. It must be observed, that all their sailing vessels are not rigged to sail in the same manner; some, and those of the largest size, are rigged so as to tack about. These have a short but pretty stout mast, which steps on a kind of roller that is fixed to the

* See Lord Anson's Voyage.

deck near the fore-part. It is made to lean or incline very much forward; the head is forked; on the two points of which the yard rests, as on two pivots, by means of two strong cleats of wood secured to each side of the yard, at about one-third its length from the tack or heel, which, when under sail, is confined down between the two canoes, by means of two strong ropes, one to and passing through a hole at the head of each canoe; for, it must be observed, that all the sailing vessels of this sort are double. The tack being thus fixed, it is plain that, in changing tacks, the vessels must be put about; the sail and boom on the one tack will be clear of the mast, and on the other it will lie against it, just as a whole mizzen. However, I am not sure if they do not sometimes unlace that part of the sail from the yard which is between the tack and mast-head, and so shift both sail and boom leeward of the mast. The drawings which Mr. Hodges made of these vessels seem to favour this supposition, and will not only illustrate, but in a manner make the description of them unnecessary. The out-riggers and ropes used for shrouds, &c. are all stout and strong. Indeed, the sail, yard, and boom, are all together of such an enormous weight, that strength is required.

The summit of Amattafoa was hid in the clouds the whole day, so that we were not able to determine with certainty whether there was a volcano or no; but every thing we could see concurred to make us believe there was. This island is about five leagues in circuit. Oghao is not so much; but more round and peaked. They lie in the direction of N. N. W. ½ W. from Anamocka, eleven or twelve leagues distant: they are both inhabited; but neither of them seemed fertile.

We were hardily through the passage before we got a fresh breeze at south. That moment, all the natives made haste to be gone, and we steered to the west, all sails set. I had some thoughts of touching

at Amsterdam, as it lay not much out of the way; but, as the wind was now, we could not fetch it; and this was the occasion of my laying my design aside altogether.

Let us now return to Anamocka, as it is called by the natives. It is situated in the latitude of 20° 15′ South, longitude 174° 31′ West, and was first discovered by Tasman, and by him named Rotterdam. It is of a triangular form, each side whereof is about three and a half or four miles. A salt-water lake in the middle of it occupies not a little of its surface, and in a manner cuts off the S. E. angle. Round the island, that is, from the N. W. to the south, round by the north and east, lie scattered a number of small isles, sand-banks, and breakers. We could see no end to their extent to the north; and it is not impossible that they reach as far south as Amsterdam, or Tongatabu. These, together with Middleburg or Eaoowee, and Pylstart, make a group, containing about three degrees of latitude and two of longitude, which I have named the Friendly Isles or Archipelago, as a firm reliance and friendship seems to subsist among their inhabitants, and their courteous behaviour to strangers entitles them to that appellation; under which we might perhaps extend their group much farther, even down to Boscawen and Keppel's isles, discovered by Captain Wallis, and lying nearly under the same meridian, and in the lattitude of 15° 53′; for, from the little account I have had of the people of these two isles, they seem to have the same sort of friendly disposition we observed in our Archipelago.

The inhabitants, productions, &c. of Rotterdam, and the neighbouring isles, are the same as at Amsterdam. Hogs and fowls are, indeed, much scarcer; of the former having got but six, and not many of the latter. Yams and shaddocks were what we got the most of; other fruits were not so plenty. Not half the isle is laid out in inclosed plantations as at

Amsterdam; but the parts which are not inclosed are not less fertile or uncultivated. There is, however, far more waste land on this isle, in proportion to its size, than upon the other, and the people seem to be much poorer; that is, in cloth, matting, ornaments, &c. which constitute a great part of the riches of the South Sea islanders.

The people of this isle seem to be more affected with the leprosy, or some scrophulous disorder, than any I have seen elsewhere. It breaks out in the face more than any other part of the body. I have seen several whose faces were ruined by it, and their noses quite gone. In one of my excursions, happening to peep into a house where one or more of them were, one man only appeared at the door, or hole by which I must have entered, and which he began to stop up, by drawing several parts of a cord across it. But the intolerable stench which came from his putrid face was alone sufficient to keep me out, had the entrance been ever so wide. His nose was quite gone, and his whole face in one continued ulcer; so that the very sight of him was shocking. As our people had not all got clear of a certain disease they had contracted at the Society isles, I took all possible care to prevent its being communicated to the natives here; and I have reason to believe my endeavours succeeded.

Having mentioned a house, it may not be amiss to observe, that some here differ from those I saw at the other isles; being inclosed or walled on every side with reeds neatly put together, but not close. The entrance is by a square hole about two and a half feet each way. The form of these houses is an oblong square; the floor or foundation every way shorter than the eve, which is about four feet from the ground. By this construction, the rain that falls on the roof is carried off from the wall; which otherwise would decay and rot.

We did not distinguish any king, or leading chief, or any person who took upon him the appearance of

supreme authority. The man and woman before mentioned, whom I believed to be man and wife, interested themselves on several occasions in our affairs; but it was easy to see they had no great authority. Amongst other things which I gave them as a reward for their service, was a young dog and bitch, animals which they have not, but are very fond of, and know very well by name. They have some of the same sort of earthen pots we saw at Amsterdam; and I am of opinion they are of their own manufacture, or that of some neighbouring isle.

The road, as I have already mentioned, is on the north side of the isle, just to the southward of the southernmost cove; for there are two on this side. The bank is of some extent, and the bottom free from rocks, with twenty-five and twenty fathoms water, one or two miles from the shore.

Fire-wood is very convenient to be got at, and easy to be shipped off; but the water is so brackish that it is not worth the trouble of carrying it on board; unless one is in great distress for want of that article, and can get no better. There is, however, better, not only on this isle, but on others in the neighbourhood; for the people brought us some in cocoa-nut shells, which was as good as need be; but probably the springs are too trifling to water a ship.

I have already observed that the S. W. side of the island is covered by a reef or reefs of rocks, and small isles. If there be a sufficient depth of water between them and the island, as there appeared to be, and a good bottom, this would be a much securer place for a ship to anchor in than that where we had our station.

CHAP. III.

THE PASSAGE FROM THE FRIENDLY ISLES TO THE NEW HEBRIDES; WITH AN ACCOUNT OF THE DISCOVERY OF TURTLE ISLAND, AND A VARIETY OF INCIDENTS WHICH HAPPENED, BOTH BEFORE AND AFTER THE SHIP ARRIVED IN PORT SANDWICH, IN THE ISLAND OF MALLICOLLO. — A DESCRIPTION OF THE PORT; THE ADJACENT COUNTRY; ITS INHABITANTS, AND MANY OTHER PARTICULARS.

On the 1st of July, at sun-rise, Amattafoa was still in sight, bearing E. by N. distant twenty leagues. Continuing our course to the west, we, the next day at noon, discovered land bearing N. W. by W. for which we steered; and, upon a nearer approach, found it to be a small island. At 4 o'clock it bore, from N. W. ½ W. to N. W. by N. and, at the same time, breakers were seen from the mast-head, extending from W. to S. W. The day being too far spent to make farther discoveries, we soon after shortened sail, hauled the wind, and spent the night making short boards, which, at daybreak, we found had been so advantageous that we were further from the island than we expected, and it was eleven o'clock before we reached the N. W. or lee-side, where anchorage and landing seemed practicable. In order to obtain a knowledge of the former, I sent the master with a boat to sound; and, in the mean time, we stood on and off with the ship. At this time, four or five people were seen on the reef, which lies round the isle, and about three times that number on the shore. As the boat advanced, those on the reef retired, and joined the others; and when the boat landed, they all fled to the woods. It was not long before the boat returned, when the master informed me that there were no soundings without the reef, over which, in one place only, he found a boat-channel of six feet water. Entering by it, he rowed in for the shore, thinking to speak with the people, not

more than twenty in number, who were armed with clubs and spears; but the moment he set his foot on shore, they retired to the woods. He left on the rocks some medals, nails, and a knife; which they, no doubt, found, as some were seen near the place afterwards. This island is not quite a league in length, in the direction of N. E. and S. W. and not half that in breadth. It is covered with wood, and surrounded by a reef of coral rocks, which, in some places, extend two miles from the shore. It seems to be too small to contain many inhabitants; and probably the few whom we saw may have come from some isle in the neighbourhood to fish for turtle; as many were seen near this reef, and occasioned that name to be given to the island, which is situated in latitude 19° 48′ South, longitude 178° 2′ West.

Seeing breakers to the S. S. W., which I was desirous of knowing the extent of before night, I left Turtle isle, and stood for them. At two o'clock we found they were occasioned by a coral bank of about four or five leagues in circuit. By the bearing we had taken, we knew these to be the same breakers we had seen the preceding evening. Hardly any part of this bank or reef is above water at the reflux of the waves. The heads of some rocks are to be seen near the edge of the reef, where it is the shoalest; for in the middle is deep water. In short, this bank wants only a few little islets to make it exactly like one of the half-drowned isles so often mentioned. It lies S. W. from Turtle island, about five or six miles, and the channel between it and the reef of that isle is three miles over. Seeing no more shoals or islands, and thinking there might be turtle on this bank, two boats were properly equipped and sent thither; but returned without having seen one.

The boats were now hoisted in, and we made sail to the west, with a brisk gale at east, which continued till the 9th, when we had, for a few hours, a breeze at N. W. attended with squalls of rain. This

was succeeded by a steady fresh gale at S. E. with which we steered N.W. being at this time in the latitude of 20° 20′ South, longitude 176° 8′ East.

On the 15th at noon, being in the latitude of 15° 9′ South, longitude 171° 16′ East, I steered west. The next day the weather was foggy, and the wind blew in heavy squalls, attended with rain, which in this ocean, within the tropics, generally indicates the vicinity of some high land. This was verified at three in the afternoon, when high land was seen bearing S. W. Upon this we took in the small sails, reefed the top-sails, and hauling up for it, at half past five, we could see it extend from S. S. W. to N. W. by W. ½ W. Soon after we tacked and spent the night, which was very stormy, in plying. Our boards were disadvantageous; for, in the morning, we found we had lost ground. This, indeed, was no wonder, for having an old suit of sails bent, the most of them were split to pieces; particularly a fore-top-sail, which was rendered quite useless. We got others to the yards, and continued to ply, being desirous of getting round the south ends of the lands, or at least so far to the south as to be able to judge of their extent in that direction. For no one doubted that this was the Australia del Espiritu Santo of Quiros, which M. de Bougainville calls the Great Cyclades, and that the coast we were now upon was the east side of Aurora island, whose longitude is 168° 30′ East.

The gale kept increasing till we were reduced to our low sails; so that, on the 18th, at seven in the morning, I gave over plying, set the topsails double-reefed, bore up for, and hauled round the north end of Aurora island, and then stretched over for the Isle of Lepers, under close-reefed topsails and courses, with a very hard gale at N. E.; but we had now the advantage of a smooth sea, having the Isle of Aurora to windward. At noon the north end of it bore N. E. ½ N. distant four leagues; our latitude, found by double

altitudes, and reduced to this time, was 15° 1′ 30″ South, longitude 168° 14′ East. At two o'clock P. M. we drew near the middle of the Isle of Lepers, and tacked about two miles from land; in which situation we had no soundings with a line of seventy fathoms. We now saw people on the shore, and many beautiful cascades of water pouring down the neighbouring hills. The next time we stood for this isle, we came to within half a mile of it, where we found thirty fathoms, a sandy bottom; but a mile off we had no soundings at seventy fathoms. Here two canoes came off to us, in one of which were three men, and in the other but one. Though we made all the signs of friendship, we could not bring them nearer than a stone's throw; and they made but a short stay before they retired ashore, where we saw a great number of people assembled in parties, and armed with bows and arrows. They are of a very dark colour, and, excepting some ornaments at their breast and arms, seemed to be entirely naked.

As I intended to get to the south, in order to explore the land which might lie there, we continued to ply between the Isle of Lepers and Aurora; and on the 19th, at noon, the south end of the last-mentioned isle bore South 24° East, and the north end north, distant twenty miles. Latitude observed 15° 11″. The wind continued to blow strong at S.E., so that what we got by plying in the day, we lost in the night. On the 20th, at sunrise, we found ourselves off the south end of Aurora, on the N.W. side of which the coast forms a small bay. In this we made some trips to try for anchorage; but found no less than eighty fathoms water, the bottom a fine dark sand, at half a mile from shore. Nevertheless, I am of opinion that, nearer, there is much less depth, and secure riding; and in the neighbourhood is plenty of fresh water and wood for fuel. The whole isle, from the sea-shore to the summits of the hills, seemed to be covered with the latter; and every

valley produced a fine stream of the former. We saw people on the shore, and some canoes on the coast, but none came off to us. Leaving the bay just mentioned, we stretched across the channel which divides Aurora from Whitsuntide island. At noon we were abreast of the north end of this latter, which bore E. N. E. and observed in 15° 28′½. The Isle of Aurora bore from N. to N. E. ½ E. and the Isle of Lepers from N. by W. ½ W. to West. Whitsuntide Isle appeared joined to the land to the S. and S. W. of it; but in stretching to S. W. we discovered the separation. This was about four o'clock P. M., and then we tacked and stretched in for the island till near sunset, when the wind veering more to the east made it necessary to resume our course to the south. We saw people on the shore, smokes in many parts of the island, and several places which seemed to be cultivated. About midnight, drawing near the south land, we tacked and stretched to the north, in order to spend the remainder of the night.

At daybreak on the 21st, we found ourselves before the channel that divides Whitsuntide island from the south land, which is about two leagues over. At this time, the land to the southward extended from S. by E. round to the west farther than the eye could reach, and on the part nearest to us, which is of considerable height, we observed two very large columns of smoke, which, I judged, ascended from volcanos. We now stood S. S. W. with a fine breeze at S. E., and at ten o'clock, discovered this part of the land to be an island which is called by the natives Ambrym. Soon after an elevated land appeared open off the south end of Ambrym; and after that, another still higher, on which is a high, peaked hill. We judged these lands to belong to two separate islands. The first came in sight at S. E. the second at E. by S., and they appeared to be ten leagues distant. Holding on our course for the land ahead, at noon it was five miles distant from us,

extending from S. S. E. to N. W. by W. and appeared to be continued. The islands to the east bore from N. E. by E. to S. E. by E., latitude observed 16° 17′ South. As we drew nearer the shore we discovered a creek, which had the appearance of being a good harbour, formed by a low point or peninsula, projecting out to the north. On this a number of people were assembled, who seemed to invite us ashore; probably with no good intent, as the most of them were armed with bows and arrows. In order to gain room and time to hoist out and arm our boats, to reconnoitre this place, we tacked and made a trip off, which occasioned the discovery of another port about a league more to the south. Having sent two armed boats to sound, and look for anchorage, on their making the signal for the latter, we sailed in S. S. W. and anchored in eleven fathoms water, not two cables' length from the S. E. shore, and a mile within the entrance.

We had no sooner anchored than several of the natives came off in canoes. They were very cautious at first; but, at last, trusted themselves along-side, and exchanged, for pieces of cloth, arrows; some of which were pointed with bone, and dipped in some green gummy substance, which we naturally suppose was poisonous. Two men having ventured on board, after a short stay I sent them away with presents. Others probably induced by this, came off by moonlight; but I gave orders to permit none to come along-side; by which means we got clear of them for the night.

Next morning early, a good many came round us, some in canoes, and others swimming. I soon prevailed on one to come on board; which he no sooner did than he was followed by more than I desired; so that not only our deck but rigging was presently filled with them. I took four into the cabin, and gave them various articles, which they showed to those in the canoes, and seemed much pleased with

their reception. While I was thus making friends with those in the cabin, an accident happened that threw all into confusion, but in the end, I believe, proved advantageous to us. A fellow in a canoe having been refused admittance into one of our boats that lay along-side, bent his bow to shoot a poisoned arrow at the boat-keeper. Some of his countrymen prevented his doing it that instant, and gave time to acquaint me with it. I ran instantly on deck, and saw another man struggling with him; one of those who had been in the cabin, and had leapt out of the window for this purpose. The other seemed resolved, shook him off, and directed his bow again to the boat-keeper; but on my calling to him, pointed it at me. Having a musket in my hand, loaded with small shot, I gave him the contents. This staggered him for a moment, but did not prevent him from holding his bow still in the attitude of shooting. Another discharge of the same nature made him drop it, and the others, who were in the canoe, to paddle off with all speed. At this time, some began to shoot arrows on the other side. A musket discharged in the air had no effect; but a four-pound shot over their heads sent them off in the utmost confusion. Many quitted their canoes and swam on shore: those in the great cabin leaped out of the windows; and those who were on the deck, and on different parts of the rigging, all leaped overboard. After this we took no farther notice of them, but suffered them to come off and pick up their canoes; and some even ventured again along-side the ship. Immediately after the great gun was fired, we heard the beating of drums on shore; which was, probably, the signal for the country to assemble in arms. We now got every thing in readines to land, to cut some wood, of which we were in want, and to try to get some refreshments, nothing of this kind having been seen in any of the canoes.

About nine o'clock, we put off in two boats, and

landed in the face of four or five hundred people, who were assembled on the shore. Though they were all armed with bows and arrows, clubs and spears, they made not the least opposition. On the contrary, seeing me advance alone, with nothing but a green branch in my hand, one of them, who seemed to be a chief, giving his bow and arrows to another, met me in the water, bearing also a green branch, which having exchanged for the one I held, he then took me by the hand, and led me up to the crowd. I immediately distributed presents to them, and, in the mean time, the marines were drawn upon the beach. I then made signs (for we understood not a word of their language) that we wanted wood; and they made signs to us to cut down the trees. By this time, a small pig being brought down and presented to me, I gave the bearer a piece of cloth, with which he seemed well pleased. This made us hope that we should soon have some more; but we were mistaken. The pig was not brought to be exchanged for what we had, but on some other account; probably as a peace-offering. For all we could say or do did not prevail on them to bring down, after this, above half-a-dozen cocoa-nuts, and a small quantity of fresh water. They set no value on nails, or any sort of iron tools; nor indeed on any thing we had. They would, now and then, exchange an arrow for a piece of cloth; but very seldom would part with a bow. They were unwilling we should go off the beach, and very desirous we should return on board. At length, about noon, after sending what wood we had cut on board, we embarked ourselves; and they all retired, some one way and some another.

Before we had dined, the afternoon was too far spent to do any thing on shore; and all hands were employed, setting up the rigging, and repairing some defects in it. But seeing a man bring along the strand a buoy, which they had taken in the night from the kedge-anchor, I went on shore for it, ac-

companied by some of the gentlemen. The moment we landed, it was put into the boat, by a man who walked off again without speaking one word. It ought to be observed, that this was the only thing they took, or even attempted to take from us, by any means whatever. Being landed near some of their plantations and houses, which were just within the skirts of the woods, I prevailed on one man to conduct me to them; but, though they suffered Mr. Forster to go with me, they were unwilling any more should follow. These houses were something like those of the other isles; rather low, and covered with palm thatch; some were inclosed, or walled round with boards; and the entrance to these was by a square hole at one end, which at this time was shut up, and they were unwilling to open it for us to look in. There were here about six houses, and some small plantations of roots, &c. fenced round with reeds as at the Friendly Isles. There were, likewise, some bread-fruit, cocoa-nut, and plaintain-trees; but very little fruit on any of them. A good many fine yams were piled up upon sticks, or a kind of raised platform; and about twenty pigs, and a few fowls, were running about loose. After making these observations, having embarked, we proceeded to the S. E. point of the harbour, where we again landed and walked along the beach till we could see the islands to the S. E. already mentioned. The names of these we now obtained, as well as the name of that on which we were. This they called Mallicollo *: the island that first appeared over the south end of Ambrym is called Apee; and the other, with the hill on it, Paoom. We found on the beach a fruit like an orange, called by them Abbi-mora, but

* Or Mallicolla. Some of our people pronounced it Manicolo or Manicola, and thus it is also written in Quiros's Memorial, as printed by Dalrymple, vol. ii. p. 146.

whether it be fit for eating, I cannot say, as this was decayed.

Proceeding next to the other side of the harbour, we there landed, near a few houses, at the invitation of some people who came down to the shore; but we had not been there five minutes before they wanted us to be gone. We complied, and proceeded up the harbour in order to sound it, and to look for fresh water, of which, as yet, we had seen none, but the very little that the natives brought, which we knew not where they got. Nor was our search now attended with success; but this is no proof that there is not any. The day was too far spent to examine the place well enough to determine this point. Night having brought us on board, I was informed that no soul had been off to the ship; so soon was the curiosity of these people satisfied. As we were coming on board, we heard the sound of a drum, and, I think, of some other instruments, and saw people dancing; but as soon as they heard the noise of the oars, or saw us, all was silent.

Being unwilling to lose the benefit of the moonlight nights, which now happened, at seven A. M. on the 23d we weighed; and, with a light air of wind, and the assistance of our boats, proceeded out of the harbour; the south end of which, at noon, bore W. S. W. distant about two miles.

When the natives saw us under sail, they came off in canoes, making exchanges with more confidence than before, and giving such extraordinary proofs of their honesty as surprised us. As the ship at first had fresh way through the water, several of them dropped astern after they had received our goods, and before they had time to deliver theirs in return. Instead of taking advantage of this, as our friends at the Society Isles would have done, they used their utmost efforts to get up with us, and to deliver what they had already been paid for. One

man, in particular, followed us a considerable time, and did not reach us till it was calm, and the thing was forgotten. As soon as he came along-side, he held up the thing which several were ready to buy; but he refused to part with it, till he saw the person to whom he had before sold it, and to him he gave it. The person not knowing him again, offered him something in return, which he refused, and showed him what he had given him before. Pieces of cloth and marbled paper were in most esteem with them; but edge tools, nails, and beads, they seemed to disregard. The greatest number of canoes we had alongside at once did not exceed eight, and not more than four or five people in each; who would frequently retire to the shore all on a sudden, before they had disposed of half their things, and then others would come off.

At the time we came out of the harbour, it was about low water, and great numbers of people were then on the shoals or reefs which lie along the shore, looking, as we supposed, for shell and other fish. Thus our being on their coast, and in one of their ports, did not hinder them from following the necessary employments. By this time they might be satisfied we meant them no harm; so that, had we made a longer stay, we might soon have been upon good terms with this ape-like nation; for, in general, they are the most ugly, ill-proportioned people I ever saw, and in every respect different from any we had met with in this sea. They are a very dark-coloured and rather diminutive race; with long heads, flat faces, and monkey countenances. Their hair mostly black or brown, is short and curly; but not quite so soft and woolly as that of a negro. Their beards are very strong, crisp, and bushy, and generally black and short. But what most adds to their deformity, is a belt, or cord, which they wear round the waist, and tie so tight over the belly that the shape of their bodies is not unlike that of an over-

grown pismire. The men go quite naked, except a piece of cloth or leaf used as a wrapper.*

We saw but few women, and they were not less ugly than the men; their heads, faces, and shoulders are painted red; they wear a kind of petticoat; and some of them had something over their shoulders like a bag, in which they carry their children. None of them came off to the ship, and they generally kept at a distance when we were on shore. Their ornaments are ear-rings made of tortoise-shell and bracelets. A curious one of the latter, four or five inches broad, wrought with thread or cord, and studded with shells, is worn by them just above the elbow. Round the right wrist they wear hogs' tusks bent circular, and rings made of shells; and round their left, a round piece of wood, which we judged was to ward off the bow-string. The bridge of the nose is pierced, in which they wear a piece of white stone, about an inch and a half long, and in this shape. As signs of friendship they present a green branch, and sprinkle water with the hand over the head.

Their weapons are clubs, spears, and bows and arrows. The two former are made of hard or iron wood. Their bows are about four feet long, made of a stick split down the middle, and are not circular, but in this form. The arrows, which are a sort of reeds, are sometimes armed with a long and sharp point, made of the hard wood, and sometimes with a very hard point made of bone; and these points are all covered with a substance which we took for poison. Indeed, the people themselves confirmed our suspicions, by making signs to us not to touch the point, and giving us to understand, that if we were pricked by them we should die. They are very

* The particular manner of applying the wrapper may be seen in Wafer's Voyage, who mentions this singular custom as existing, though with some little variation, amongst the Indians of the Isthmus of Darien. See Wafer's Voyage, p. 140.

careful of them themselves, and keep them always wrapped up in a quiver. Some of these arrows are armed with two or three points, each with small prickles on the edges, to prevent the arrow being drawn out of the wound.

The people of Mallicollo seemed to be a quite different nation from any we had yet met with, and speak a different language. Of about eighty words which Mr. Forster collected, hardly one bears any affinity to the language spoken at any other island or place I had ever been at. The letter R is used in many of their words; and frequently two or three being joined together, such words we found difficult to pronounce. I observed that they could pronounce most of our words with great ease. They express their admiration by hissing like a goose.

To judge of the country by the little we saw of it, it must be fertile; but I believe their fruits are not so good as those of the Society or Friendly Isles. Their cocoa-nut trees, I am certain, are not; and their bread-fruit and plantains did not seem much better. But their yams appeared to be very good. We saw no other animals than those I have already mentioned. They have not so much as a name for a dog, and consequently have none; for which reason we left them a dog and a bitch; and there is no doubt they will be taken care of, as they were very fond of them.

After we had got to sea, we tried what effect one of the poisoned arrows would have on a dog. Indeed we had tried it in the harbour the very first night, but we thought the operation had been too slight, as it had no effect. The surgeon now made a deep incision in the dog's thigh, into which he laid a large portion of the poison just as it was scraped from the arrows, and then bound up the wound with a bandage. For several days after, we thought the dog was not so well as he had been before; but whether this was really so, or only suggested by

imagination, I know not. He was afterwards as if nothing had been done to him, and lived to be brought home to England. However, I have no doubt of this stuff being of a poisonous quality, as it could answer no other purpose. The people seemed not unacquainted with the nature of poison; for when they brought us water on shore, they first tasted it, and then gave us to understand we might with safety drink it.

This harbour, which is situated on the N. E. side of Mallicollo, not far from the S. E. end, in latitude 16° 25′ 20″ S., longitude 167° 57′ 23″ E., I named Port Sandwich. It lies in S. W. by S. about one league, and is one-third of a league broad. A reef of rocks extends out a little way from each point; but the channel is of a good breadth, and hath in it from forty to twenty-four fathoms water. In the port, the depth of water is from twenty to four fathoms; and it is so sheltered that no winds can disturb a ship at anchor there. Another great advantage is, you can lie so near the shore as to cover your people who may be at work upon it.

CHAP. IV.

AN ACCOUNT OF THE DISCOVERY OF SEVERAL ISLANDS, AN INTERVIEW AND SKIRMISH WITH THE INHABITANTS UPON ONE OF THEM. THE ARRIVAL OF THE SHIP AT TANNA, AND THE RECEPTION WE MET WITH THERE.

Soon after we got to sea, we had a breeze at E.S.E. with which we stood over for Ambrym till three o'clock in the afternoon, when the wind veering to E.N.E. we tacked and stretched to the S.E. and weathered the S.E. end of Mallicollo, off which we discovered three or four small islands, that before appeared to be connected. At sun-set the point bore S. 77° West, distant three leagues, from which the coast seemed to trend away West. At this time the isle of Ambrym extended from N. 30° E. to N. 65° E. The isle of Paoom from N. 76° E. to S. 88° E. and the isle of Apee from S. 83° E. to S. 43° East. We stood for this last isle, which we reached by midnight, and then brought to till day-break on the 24th, when we made sail to the S.E. with a view of plying up to the eastward on the south side of Apee. At sun-rise, we discovered several more islands, extending from the S.E. point of Apee to the South as far as S.E. by S. The nearest to us we reached by ten o'clock, and not being able to weather it, we tacked a mile from its shore in fourteen fathoms water. This island is about 4 leagues in circuit, is remarkable by having three high peaked hills upon it, by which it has obtained that name. In the P. M. the wind veering more to the north, we resumed our course to the east; and having weathered Threehills, stood for the group of small isles which lie off the S.E. point of Apee. These I called Shepherd's Isles, in honour of my worthy friend Dr. Shepherd, Plumian professor of astronomy at Cambridge. Having a fine breeze, I had thoughts of going through between them; but the channels being narrow, and

seeing broken water in the one we were steering for, I gave up the design, and bore up, in order to go without, or to the south of them. Before this could be accomplished, it fell calm, and we were left to the mercy of the current, close to the isles, where we could find no soundings with a line of an hundred and eighty fathoms. We had now lands or islands in every direction, and were not able to count the number which lay round us. The mountain on Paoom was seen over the east end of Apee, bearing N.N.W. at eight o'clock. A breeze at S.E. relieved us from the anxiety the calm had occasioned; and we spent the night making short boards.

The night before we came out of Port Sandwich, two reddish fish, about the size of large bream, and not unlike them, were caught with hook and line. On these fish most of the officers, and some of the petty officers, dined the next day. The night following, every one who had eaten of them was seized with violent pains in the head and bones, attended with a scorching heat all over the skin, and numbness in the joints. There remained no doubt that this was occasioned by the fish being of a poisonous nature, and having communicated its bad effects to all who partook of them; even to the hogs and dogs. One of the former died about sixteen hours after; it was not long before one of the latter shared the same fate; and it was a week or ten days, before all the gentlemen recovered. These must have been the same sort of fish mentioned by Quiros *, under the name of Pargos, which poisoned the crews of his ships, so that it was some time before they recovered; and we should, doubtless, have been in the same situation, had more of them been eaten.

At day-break on the 25th, we made a short stretch to the east of Shepherd's Isles till after sun-rise, when, seeing no more land in that direction, we tacked and stood for the island we had seen in the south, having a gentle breeze at S.E. We passed

* Dalrymple's Collection of Voyages, vol. i. p. 140, 141.

to the east of Threehills, and likewise of a low isle, which lies on the S.E. side of it, between a remarkable peaked rock which obtained the name of Monument, and a small island named Twohills, on account of two peaked hills upon it, disjoined by a low and narrow isthmus. The channel between this island and the Monument is near a mile broad, and twenty-four fathoms deep. Except this rock, which is only accessible to birds, we did not find an island on which people were not seen. At noon, we observed, in latitude 17° 18′ 30″ longitude, made from Port Sandwich, 45′ East. In this situation the Monument bore N. 16° East, distant two miles; Twohills bore N. 25° West, distant two miles, and in a line with the S. W. part of Threehills; and the islands to the South extended from S. 16° 30′ E. to S. 42° West.

Continuing our course to the south, at five P. M. we drew near the southern lands, which we found to consist of one large island, whose southern and western extremities extended beyond our sight, and three or four smaller ones, lying off its north side. The two northernmost are much the largest, have a good height, and lie in the direction of E. by S. and W. by N. from each other, distant two leagues. I named the one Montagu, and the other Hinchinbrook, and the large island Sandwich, in honour of my noble patron the earl of Sandwich. Seeing broken water a-head between Montagu and Hinchinbrook Isles, we tacked; and soon after it fell calm. The calm continued till seven o'clock the next morning, when it was succeeded by a breeze from the westward. During the calm, having been carried by the currents and a S.E. swell, four leagues to the W. N.W. we passed Hinchinbrook Isle, saw the western extremity of Sandwich Island, bearing S.S.W. about five leagues distant, and at the same time discovered a small island to the west of this direction. After getting the westerly breeze, I steered S.E. in

order to pass between Montagu Isle and the north end of Sandwich Island. At noon we were in the middle of the channel, and observed in latitude 17° 31′ South. The distance from one island to the other is about four or five miles; but the channel is not much above half that breadth, being contracted by breakers. We had no soundings in it with a line of forty fathoms.

As we passed Montagu Isle several people came down to the sea-side, and, by signs, seemed to invite us ashore. Some were also seen on Sandwich Island, which exhibited a most delightful prospect, being spotted with woods and lawns, agreeably diversified, over the whole surface. It hath a gentle slope from the hills, which are of a moderate height, down to the sea-coast. This is low and guarded by a chain of breakers, so that there is no approaching it at this part. But more to the west, beyond Hinchinbrook Island, there seemed to run in a bay sheltered from the reigning winds. The examining it not being so much an object with me as the getting to the south, in order to find the southern extremity of the Archipelago, with this view I steered S.S.E. being the direction of the coast of Sandwich Island. We had but just got through the passage, before the west wind left us to variable light airs and calms; so that we were apprehensive of being carried back again by the currents, or rather of being obliged to return in order to avoid being driven on the shoals, as there was no anchorage, a line of an hundred and sixty fathoms not reaching to the bottom. At length a breeze springing up at S.W. we stood to S.E. and at sun-set the Monument bore N. 14° 30′ West, and Montagu Island N. 28° West, distant three leagues. We judged we saw the S.E. extremity of Sandwich Island bearing about S. by E.

We continued to stand to S.E. till four A. M. on the 27th, when we tacked to the west. At sun-rise having discovered a new land bearing south, and making in three hills, this occasioned us to tack and

stand towards it. At this time Montagu Isle bore N. 52° West, distant thirteen leagues; at noon it was nearly in the same direction, and the new land extended from S. ½ E. to S. by W. and three hills seemed to be connected. Our latitude, by observation, was 18° 1′ S. and the longitude, made from Port Sandwich, 1° 23′ E. We continued to stand to the S.E. with a gentle breeze at S.W. and S.S.W. till the 28th at sun-rise, when, the wind veering to the south, we tacked and stood to the west. The three hills mentioned above, we now saw belonged to one island, which extended from S. 35° to 71° West, distant about ten or twelve leagues.

Retarded by contrary winds, calms, and the currents that set to N.W., we were three days in gaining this space; in which time we discovered an elevated land to the south of this. It first appeared in detached hummocks, but we judged it to be connected. At length, on the 1st of August, about ten A. M. we got a fine breeze at E.S.E. which soon after veered to N. E. and we steered for the N. W. side of the island. Reaching it about two P. M. we ranged the west coast at one mile from shore, on which the inhabitants appeared in several parts, and by signs invited us to land. We continued to sound without finding bottom, till we came before a small bay, or bending of the coast, where, near a mile from shore, we found thirty and twenty-two fathoms water, a sandy bottom. I had thoughts of anchoring here, but the wind almost instantly veered to N. W., which being nearly on shore, I laid this design aside. Besides, I was unwilling to lose the opportunity that now offered of getting to the south-east, in order first to explore the lands which lay there. I therefore continued to range the coast to the south, at about the same distance from shore; but we soon got out of soundings. About a league to the south of this bay, which hath about two miles extent, is another more extensive. Towards the evening, the

breeze began to abate, so that it was sun-set before we got the length of it. I intended not to stop here, and stand to the south under an easy sail all night, but at eight o'clock, as we were steering S. S. E. we saw a light a-head. Not knowing but it might be on some low detached isle, dangerous to approach while dark, we hauled the wind, and spent the night standing off and on, or rather driving to and fro; for we had but very little wind.

At sun-rise on the 2d, we saw no more land than the coast we were upon; but found that the currents had carried us some miles to the north, and we attempted, to little purpose, to regain what we had lost. At noon we were about a league from the coast, which extended from S. S. E. to N. E. Latitude observed 18° 46′ S. In the afternoon, finding the ship to drift, not only to the north, but in shore also, and being yet to the south of the bay we passed the day before, I had thoughts of getting to an anchor before night, while we had it in our power to make choice of a place. With this view, having hoisted out two boats, one of them was sent a-head to tow the ship; in the other Mr. Gilbert went, to sound for anchorage. Soon after, the towing boat was sent to assist him. So much time was spent in sounding this bay, that the ship drove past, which made it necessary to call the boats on board to tow her off from the northern point. But this service was performed by a breeze of wind, which, that moment, sprung up at S. W., so that as the boats got on board, we hoisted them in, and then bore up for the north side of the island, intending once more to try to get round by the east. Mr. Gilbert informed me, that, at the south part of the bay, he found no soundings till close to a steep stone beach, where he landed to taste a stream of water he saw there, which proved to be salt. Some people were seen there, but they kept at a distance. Farther down the coast, that is to the north, he found twenty, twenty-four, and thirty

fathoms, three-fourths of a mile, or a mile from shore, the bottom a fine dark sand.

On the 3d, at sun-rise, we found ourselves abreast a lofty promontory on the S. E. side of the island, and about three leagues from it. Having but little wind, and that from the south, right in our teeth, and being in want of fire-wood, I sent Lieutenant Clerke with two boats to a small islot which lies off the promontory, to endeavour to get some. In the mean time we continued to ply up with the ship; but what we gained by our sails, we lost by the current. At length, towards noon, we got a breeze at E. S. E. and E. with which we could lie up for the head; and soon after Mr. Clerke returned, having not been able to land, on account of an high surf on the shore. They met with no people on the isle; but saw a large bat, and some birds, and caught a water-snake. At six o'clock P. M. we got in with the land, under the N. W. side of the head, where we anchored in seventeen fathoms water, the bottom a fine dark sand, half a mile from shore; the point of the head bearing N. 18° East, distant half a league; the little islot before mentioned N. E. by E. ½ E. and the N. W. point of the bay N. 32° West. Many people appeared on the shore, and some attempted to swim off to us; but having occasion to send the boat a-head to sound, they retired as she drew near them. This, however, gave us a favourable idea of them.

On the 4th, at day-break, I went with two boats to examine the coast, to look for a proper landing-place, wood, and water. At this time, the natives began to assemble on the shore, and by signs invited us to land. I went first to a small beach, which is towards the head, where I found no good landing, on account of some rocks which every where lined the coast. I, however, put the boat's bow to the shore, and gave cloth, medals, &c. to some people who were there. For this treatment they offered to haul the boats over the breakers to the sandy beach; which

I thought a friendly offer, but had reason afterwards to alter my opinion. When they found I would not do as they desired, they made signs for us to go down into the bay, which we accordingly did, and they ran along shore abreast of us, their number increasing prodigiously. I put into the shore in two or three places, but, not liking the situation, did not land. By this time, I believe, the natives conceived what I wanted, as they directed me round a rocky point, where, on a fine sandy beach, I stepped out of the boat without wetting a foot, in the face of a vast multitude, with only a green branch in my hand, which I had before got from one of them. I took but one man out of the boat with me, and ordered the other boat to lie to a little distance off. They received me with great courtesy and politeness, and would retire back from the boat on my making the least motion with my hand. A man whom I took to be a chief, seeing this, made them form a semicircle round the boat's bow, and beat such as attempted to break through this order. This man I loaded with presents, giving likewise to others, and asked by signs for fresh water, in hopes of seeing where they got it. The chief immediately sent a man for some, who ran to a house, and presently returned with a little in a bamboo; so that I gained but little information by this. I next asked, by the same means, for something to eat; and they as readily brought me a yam, and some cocoa-nuts. In short, I was charmed with their behaviour; and the only thing which could give the least suspicion was, that most of them were armed with clubs, spears, darts, and bows and arrows. For this reason I kept my eye continually upon the chief, and watched his looks as well as his actions. He made many signs to me to haul the boat up upon the shore, and at last slipped into the crowd, where I observed him speak to several people, and then return to me, repeating signs to haul the boat up, and hesitating a good deal before he would receive some

spike-nails which I then offered him. This made me suspect something was intended, and immediately I stepped into the boat, telling them by signs that I should soon return. But they were not for parting so soon, and now attempted, by force, what they could not obtain by gentler means. The gang-board happened unluckily to be laid out for me to come into the boat. I say unluckily, for if it had not been out, and if the crew had been a little quicker in getting the boat off, the natives might not have had time to put their design in execution, nor would the following disagreeable scene have happened. As we were putting off the boat, they laid hold of the gang-board, and unhooked it off the boat's stern, but as they did not take it away, I thought this had been done by accident, and ordered the boat in again to take it up. Then they themselves hooked it over the boat's stern, and attempted to haul her ashore; others, at the same time, snatched the oars out of the people's hands. On my pointing a musket at them, they in some measure desisted, but returned in an instant, seemingly determined to haul the boat ashore. At the head of this party was the chief; the others, who could not come at the boat, stood behind with darts, stones, and bows and arrows in hand, ready to support them. Signs and threats having no effect, our own safety became the only consideration; and yet I was unwilling to fire on the multitude, and resolved to make the chief alone fall a victim to his own treachery; but my musket at this critical moment missed fire. Whatever idea they might have formed of the arms we held in our hands, they must now have looked upon them as childish weapons, and began to let us see how much better theirs were, by throwing stones and darts, and by shooting arrows. This made it absolutely necessary for me to give orders to fire. The first discharge threw them into confusion; but a second was hardly sufficient to drive them off the beach; and, after all, they continued

to throw stones from behind the trees and bushes, and, every now and then, to pop out and throw a dart. Four lay, to all appearance, dead on the shore; but two of them afterwards crawled into the bushes. Happy it was for these people, that not half our muskets would go off, otherwise many more must have fallen. We had one man wounded in the cheek with a dart, the point of which was as thick as my finger, and yet it entered above two inches; which shews that it must have come with great force, though indeed we were very near them. An arrow struck Mr. Gilbert's naked breast, who was about thirty yards off; but probably it had struck something before; for it hardly penetrated the skin. The arrows were pointed with hard wood.

As soon as we got on board, I ordered the anchor to be weighed, with a view of anchoring near the landing-place. While this was doing, several people appeared on the low rocky point, displaying two oars we had lost in the scuffle. I looked on this as a sign of submission, and of their wanting to give us the oars. I was, nevertheless, prevailed on to fire a four pound shot at them, to let them see the effect of our great guns. The ball fell short, but frightened them so much, that none were seen afterwards; and they left the oars standing up against the bushes.

It was now calm; but the anchor was hardly at the bow before a breeze sprung up at north, of which we took the advantage, set our sails, and plyed out of the bay, as it did not seem capable of supplying our wants, with that conveniency I wished to have. Besides, I always had it in my power to return to this place, in case I should find none more convenient farther south.

These islanders seemed to be a different race from those of Mallicollo, and spoke a different language. They are of the middle size, have a good shape, and tolerable features. Their colour is very dark, and they paint their faces, some with black, and others

with red pigment. Their hair is very curly and crisp, and somewhat woolly. I saw a few women, and I thought them ugly; they wore a kind of petticoat made of palm leaves, or some plant like it. But the men, like those of Mallicollo, were in a manner naked; having only the belt about the waist, and the piece of cloth, or leaf, used as a wrapper. * I saw no canoes with these people, nor were any seen in any part of this island. They live in houses covered with thatch, and their plantations are laid out by line, and fenced round.

At two o'clock in the afternoon, we were clear of the bay, bore up round the head, and steered S. S. E. for the south end of the island, having a fine breeze at N. W. On the S. W. side of the head is a pretty deep bay, which seemed to run in behind the one on the N. W. side. Its shores are low, and the adjacent lands appeared very fertile. It is exposed to the S. E. winds; for which reason, until it be better known, the N. W. bay is preferable, because it is sheltered from the reigning winds; and the winds to which it is open, viz. from N. W. by N. to E. by N. seldom blow strong. The promontory, or peninsula, which disjoins these two bays, I named Traitor's Head, from the treacherous behaviour of its inhabitants. It is the N. E. point of the island, situated in the latitude 18° 43′ south, longitude 169° 28′ east, and terminates in a saddle hill which is of height sufficient to be seen sixteen or eighteen leagues. As we advanced to S. S. E., the new island we had before discovered began to appear over the S. E. point of the one near us, bearing S. ½ E. distant ten or twelve leagues. After leaving this one, we steered for the East end of the other, being directed by a great light we saw upon it.

At one o'clock the next morning, drawing near the shore, we tacked, and spent the remainder of the

* See the Note, p. 32.

night making short boards. At sun-rise, we discovered a high table land (an island) bearing E. by S., and a small low isle in the direction of N. N. E. which we had passed in the night without seeing it. Traitor's Head was still in sight, bearing N. 20° West, distant fifteen leagues, and the island to the south extended from S. 7° West to S. 87° West, distant three or four miles. We then found that the light we had seen in the night, was occasioned by a volcano, which we observed to throw up vast quantities of fire and smoke, with a rumbling noise heard at a great distance. We now made sail for the island; and, presently after, discovered a small inlet which had the appearance of being a good harbour. In order to be better informed, I sent away two armed boats, under the command of Lieutenant Cooper, to sound it; and, in the mean while, we stood on and off with the ship, to be ready to follow, or give them any assistance they might want. On the east point of the entrance, we observed a number of people, and several houses and canoes; and when our boats entered the harbour they launched some, and followed them, but came not near. It was not long before Mr. Cooper made the signal for anchorage; and we stood in with the ship. The wind being at west, and our course S. S. W., we borrowed close to the west point, and passed over some sunken rocks, which might have been avoided by keeping a little more to the east, or about one-third channel over. The wind left us as soon as we were within the entrance, and obliged us to drop an anchor in four fathoms water. After this, the boats were sent again to sound; and, in the mean time, the launch was hoisted out, in order to carry out anchors to warp in by, as soon as we should be acquainted with the channel.

While we were thus employed, many of the natives got together in parties, on several parts of the shore, all armed with bows, spears, &c. Some swam off to us, others came in canoes. At first they were

shy, and kept at the distance of a stone's throw; they grew insensibly bolder; and, at last, came under our stern, and made some exchanges. The people in one of the first canoes, after coming as near as they durst, threw towards us some cocoa-nuts. I went into a boat and picked them up, giving them in return some cloth and other articles. This induced others to come under the stern, and alongside, where their behaviour was insolent and daring. They wanted to carry off every thing within their reach; they got hold of the fly of the ensign, and would have torn it from the staff; others attempted to knock the rings off the rudder; but the greatest trouble they gave us was to look after the buoys of our anchors, which were no sooner thrown out of the boats, or let go from the ship, than they got hold of them. A few musquets fired in the air had no effect; but a four-pounder frightened them so much, that they quitted their canoes that instant, and took to the water. But as soon as they found themselves unhurt, they got again into their canoes; gave us some halloos; flourished their weapons; and returned once more to the buoys. This put us to the expence of a few musketoon shot, which had the desired effect. Although none were hurt, they were afterwards afraid to come near the buoys; very soon all retired on shore; and we were permitted to sit down to dinner undisturbed.

During these transactions, a friendly old man in a small canoe made several trips between us and the shore, bringing off each time a few cocoa-nuts, or a yam, and taking in exchange whatever we gave him. Another was on the gangway when the great gun was fired, but I could not prevail on him to stay there long. Towards the evening, after the ship was moored, I landed at the head of the harbour, in the S. E. corner, with a strong party of men, without any opposition being made by a great number of the natives who were assembled in two parties, the one

on our right, the other on our left, armed with clubs, darts, spears, slings, and stones, bows and arrows, &c. After distributing to the old people, (for we could distinguish no chief,) and some others, presents of cloth, medals, &c., I ordered two casks to be filled with water out of a pond about twenty paces behind the landing-place; giving the natives to understand, that this was one of the articles we wanted. Besides water, we got from them a few cocoa-nuts, which seemed to be in plenty on the trees; but they could not be prevailed upon to part with any of their weapons. These they held in constant readiness, and in the proper attitudes of offence and defence; so that little was wanting to make them attack us; at least we thought so, by their pressing so much upon us, and in spite of our endeavours to keep them off. Our early re-embarking probably disconcerted their scheme; and after that, they all retired. The friendly old man before mentioned, was in one of these parties; and we judged, from his conduct, that his temper was pacific.

CHAP. V.

AN INTERCOURSE ESTABLISHED WITH THE NATIVES; SOME ACCOUNT OF THE ISLAND; AND A VARIETY OF INCIDENTS THAT HAPPENED DURING OUR STAY AT IT.

As we wanted to take in a large quantity both of wood and water, and as, when I was on shore, I had found it practicable to lay the ship much nearer the landing-place than she now was, which would greatly facilitate that work, as well as over-awe the natives, and enable us better to cover and protect the working party on shore; with this view, on the 6th, we went to work to transport the ship to the place I designed to moor her in. While we were about this, we observed the natives assembling from all parts, and forming themselves into two parties, as they did the preceding evening, one on each side the landing-place, to the amount of some thousands, armed as before. A canoe, sometimes conducted by one, and at other times by two or three men, now and then came off, bringing a few cocoa-nuts or plantains. These they gave us without asking for any return; but I took care that they should always have something. Their chief design seemed to be to invite us on shore. One of those who came off was the old man who had already ingratiated himself into our favour. I made him understand, by signs, that they were to lay aside their weapons, took those which were in the canoe and threw them overboard, and made him a present of a large piece of cloth. There was no doubt that he understood me, and made my request known to his countrymen. For as soon as he landed we observed him to go first to the one party, and then to the other; nor was he, ever after, seen by us with any thing like a weapon in his hand. After this, three fellows came in a canoe under the stern, one

of them brandishing a club, with which he struck the ship's side, and committed other acts of defiance, but at last offered to exchange it for a string of beads, and some other trifles. These were sent down to him by a line; but the moment they were in his possession, he and his companions paddled off in all haste, without giving the club, or any thing else, in return. This was what I expected, and indeed what I was not sorry for, as I wanted an opportunity to show the multitude on shore the effect of our fire-arms, without materially hurting any of them. Having a fowling-piece, loaded with small shot, (No. 3.) I gave the fellow the contents; and, when they were above musket-shot off, I ordered some of the musketoons, or wall-pieces, to be fired, which made them leap out of the canoe, keep under her off side, and swim with her ashore. This transaction seemed to make little or no impression on the people there. On the contrary, they began to halloo, and to make sport of it.

After mooring the ship, by four anchors, with her broadside to the landing-place, hardly a musket-shot off, and placing our artillery in such a manner as to command the whole harbour, I embarked with the marines, and a party of seamen, in three boats, and rowed in for the shore. It hath been already mentioned, that the two divisions of the natives were drawn up on each side the landing-place. They had left a space between them of about thirty or forty yards, in which were laid, to the most advantage, a few small bunches of plantains, a yam, and two or three roots. Between these and the water were stuck upright in the sand, for what purpose I never could learn, four small reeds, about two feet from each other, in a line at right angles to the shore, where they remained for two or three days after. The old man before mentioned, and two more, stood by these things, inviting us, by signs, to land; but I had not forgot the trap I was so near being caught in at the

last island; and this looked something like it. We answered, by making signs for the two divisions to retire farther back, and give us more room. The old man seemed to desire them so to do, but no more regard was paid to him than to us. More were continually joining them, and, except two or three old men, not one unarmed. In short, every thing conspired to make us believe they meant to attack us as soon as we should be on shore; the consequence of which was easily supposed; many of them must have been killed and wounded, and we should hardly have escaped unhurt; two things I equally wished to prevent. Since, therefore, they would not give us the room we required, I thought it was better to frighten them into it, than to oblige them by the deadly effect of our fire-arms. I accordingly ordered a musket to be fired over the party on our right, which was by far the strongest body; but the alarm it gave them was momentary. In an instant they recovered themselves, and began to display their weapons. One fellow showed us his backside, in a manner which plainly conveyed his meaning. After this I ordered three or four muskets to be fired. This was the signal for the ship to fire a few great guns, which presently dispersed them; and then we landed, and marked out the limits, on the right and left, by a line. Our old friend stood his ground, though deserted by his two companions, and I rewarded his confidence with a present. The natives came gradually to us, seemingly in a more friendly manner; some even without their weapons, but by far the greatest part brought them; and when we made signs to lay them down, they gave us to understand that we must lay down ours first. Thus all parties stood armed. The presents I made to the old people, and to such as seemed to be of consequence, had little effect on their conduct. They indeed climbed the cocoa-nut trees, and threw us down the nuts, without requiring any thing for them; but I took care that they should

always have somewhat in return. I observed that many were afraid to touch what belonged to us; and they seemed to have no notion of exchanging one thing for another. I took the old man, whose name we now found to be Paowang, to the woods, and made him understand, I wanted to cut down some trees to take on board the ship; cutting some down at the same time, which we put into one of our boats, together with a few small casks of water, with a view of letting the people see what it was we chiefly wanted. Paowang very readily gave his consent to cut wood; nor was there any one who made the least objection. He only desired the cocoa-nut trees might not be cut down. Matters being thus settled, we embarked and returned on board to dinner, and, immediately after, they all dispersed. I never learnt that any one was hurt by our shot, either on this or the preceding day; which was a very happy circumstance. In the afternoon, having landed again, we loaded the launch with water, and having made three hauls with the seine, caught upwards of three hundred pounds of mullet and other fish. It was some time before any of the natives appeared, and not above twenty or thirty at last, amongst whom was our trusty friend Paowang, who made us a present of a small pig, which was the only one we got at this isle, or that was offered us.

During the night, the volcano, which was about four miles to the west of us, vomited up vast quantities of fire and smoke, as it had also done the night before; and the flames were seen to rise above the hill which lay between us and it. At every eruption, it made a long rumbling noise like that of thunder, or the blowing up of large mines. A heavy shower of rain, which fell at this time, seemed to increase it; and the wind blowing from the same quarter, the air was loaded with its ashes, which fell so thick, that every thing was covered with the dust. It was a kind of

fine sand or stone, ground or burnt to powder, and was exceedingly troublesome to the eyes.

Early in the morning of the 7th, the natives began again to assemble near the watering-place, armed as usual, but not in such numbers as at first. After breakfast we landed, in order to cut wood and fill water. I found many of the islanders much inclined to be friends with us, especially the old people; on the other hand, most of the younger were daring and insolent, and obliged us to keep to our arms. I staid till I saw no disturbance was like to happen, and then returned to the ship, leaving the party under the command of Lieutenants Clerke and Edgcumbe. When they came on board to dinner, they informed me that the people continued to behave in the same inconsistent manner as in the morning; but more especially one man, whom Mr. Edgcumbe was obliged to fire at, and believed he had struck with a swan-shot. After that, the others behaved with more discretion; and as soon as our people embarked, they all retired. While we were sitting at dinner, an old man came on board, looked into many parts of the ship, and then went ashore again.

In the afternoon, only a few of those who lived in the neighbourhood, with whom we were now upon a tolerable footing, made their appearance at the watering-place. Paowang brought us an axe which had been left by our people, either in the woods or on the beach, and found by some of the natives. A few other articles were afterwards returned to us, which either they had stolen, or we had lost by our negligence. So careful were they now not to offend us in this respect.

Early the next morning, I sent the launch, protected by a party of marines in another boat, to take in ballast, which we wanted. This work was done before breakfast; and after it, she was sent for wood and water, and with her the people employed in this service under the protection of a serjeant's

guard, which was now thought sufficient, as the natives seemed to be pretty well reconciled to us. I was told, that they asked our people to go home with them, on condition they stripped naked as they were. This shows that they had no design to rob them, whatever other they might have.

On the 9th, I sent the launch for more ballast, and the guard and wooders to the usual place. With these I went myself, and found a good many of the natives collected together, whose behaviour, though armed, was courteous and obliging; so that there was no longer any occasion to mark out the limits by a line; they observed them without this precaution. As it was necessary for Mr. Wales's instruments to remain on shore all the middle of the day, the guard did not return to dinner, as they had done before, till relieved by others. When I came off, I prevailed on a young man, whose name was Wha-a-gou, to accompany me. Before dinner I showed him every part of the ship; but did not observe that any one thing fixed his attention a moment, or caused in him the least surprise. He had no knowledge of goats, dogs, or cats, calling them all hogs (*Booga* or *Boogas*). I made him a present of a dog and a bitch, as he showed a liking to that kind of animal. Soon after he came on board, some of his friends followed in a canoe, and enquired for him, probably doubtful of his safety. He looked out of the quarter-gallery, and having spoken to them, they went ashore, and quickly returned with a cock, a little sugar-cane, and a few cocoa-nuts, as a present to me. Though he sat down with us, he did but just taste our salt pork, but eat pretty heartily of yam, and drank a glass of wine. After dinner I made him presents, and then conducted him ashore.

As soon as we landed, the youth and some of his friends took me by the hand, with a view, as I understood, to conduct me to their habitations. We

had not gone far, before some of them, for what reason I know not, were unwilling I should proceed; in consequence of which the whole company stopped; and, if I was not mistaken, a person was dispatched for something or other to give me; for I was desired to sit down and wait, which I accordingly did. During this interval, several of our gentlemen passed us, at which they showed great uneasiness, and importuned me so much to order them back, that I was at last obliged to comply. They were jealous of our going up the country, or even along the shore of the harbour. While I was waiting here, our friend Paowang came with a present of fruit and roots, carried by about twenty men; in order, as I supposed, to make it appear the greater. One had a small bunch of plantains, another a yam, a third a cocoa-nut, &c.: but two men might have carried the whole with ease. This present was in return for something I had given him in the morning; however, I thought the least I could do now, was to pay the porters.

After I had dispatched Paowang, I returned to Wha-a-gou and his friends, who were still for detaining me. They seemed to wait with great impatience for something, and to be unwilling and ashamed to take away the two dogs, without making me a return. As night was approaching, I pressed to be gone; with which they complied, and so we parted.

The preceding day, Mr. Forster learnt from the people the proper name of the island, which they call Tanna; and this day I learnt from them the names of those in the neighbourhood. The one we touched at last is called Erromango; the small isle, which we discovered the morning we landed here, Immer; the Table Island to the east, discovered at the same time, Erronan or Foottoona; and an island which lies to the S. E. Annattom. All these islands are to be seen from Tanna.

They gave us to understand, in a manner which I thought admitted of no doubt, that they eat human

flesh, and that circumcision was practised among them. They began the subject of eating human flesh of their own accord, by asking us if we did; otherwise I should never have thought of asking them such a question. I have heard people argue, that no nation could be cannibals, if they had other flesh to eat, or did not want food; thus deriving the custom from necessity. The people of this island can be under no such necessity; they have fine pork and fowls, and plenty of roots and fruits. But since we have not actually seen them eat human flesh, it will admit of doubt with some, whether they are cannibals.

When I got on board, I learnt that, when the launch was on the west side of the harbour taking in ballast, one of the men employed on this work had scalded his fingers in taking a stone up out of some water. This circumstance produced the discovery of several hot springs at the foot of the cliff, and rather below high water mark.

This day Mr. Wales and two or three of the officers advanced a little, for the first time, into the island. They met with a straggling village, the inhabitants of which treated them with great civility; and the next morning, Mr. Forster and his party, and some others, made another excursion inland. They met with several fine plantations of plantains, sugar-canes, yams, &c.; and the natives were courteous and civil. Indeed, by this time, the people, especially those in our neighbourhood, were so well reconciled to us, that they showed not the least dislike at our rambling about in the skirts of the woods, shooting, &c. In the afternoon, some boys having got behind thickets, and having thrown two or three stones at our people, who were cutting wood, they were fired at by the petty officers present on duty. Being ashore at the time, I was alarmed at hearing the report of the muskets, and seeing two or three boys run out of the wood. When I knew the cause, I was much

displeased at so wanton an use being made of our fire-arms, and took measures to prevent it for the future. Wind southerly, with heavy showers of rain.

During the night, and also all the 11th, the volcano was exceedingly troublesome, and made a terrible noise, throwing up prodigious columns of fire and smoke at each explosion, which happened every three or four minutes; and, at one time, great stones were seen high in the air. Besides the necessary work of wooding and watering, we struck the main-top-mast to fix new trestle-trees and back-stays. Mr. Forster and his party went up the hill on the west side of the harbour, where he found three places from whence smoke of a sulphureous smell issued, through cracks or fissures in the earth. The ground about these was exceedingly hot, and parched or burnt, and they seemed to keep pace with the volcano, for at every explosion of the latter, the quantity of smoke or steam in these was greatly increased, and forced out so as to rise in small columns, which we saw from the ship, and had taken for common fires made by the natives. At the foot of this hill are the hot springs before mentioned.

In the afternoon Mr. Forster, having begun his botanical researches on the other side of the harbour, fell in with our friend Paowang's house, where he saw most of the articles I had given him, hanging on the adjoining trees and bushes, as if they were not worthy of being under his roof.

On the 12th, some of the officers accompanied Mr. Forster to the hot places he had been at the preceding day. A thermometer placed in a little hole made in one of them, rose from 80, at which it stood in the open air, to 170. Several other parts of the hill emitted smoke or steam all the day, and the volcano was unusually furious, insomuch, that the air was loaded with its ashes. The rain which fell at this time, was a compound of water, sand, and earth; so that it properly might be called showers of

mire. Whichever way the wind was, we were plagued with the ashes; unless it blew very strong indeed from the opposite direction. Notwithstanding the natives seemed well enough satisfied with the few expeditions we had made in the neighbourhood; they were unwilling we should extend them farther. As a proof of this, some undertook to guide the gentlemen when they were in the country, to a place where they might see the mouth of the volcano. They very readily embraced the offer; and were conducted down to the harbour, before they perceived the cheat.

The 13th, wind at N. E., gloomy weather. The only thing worthy of note this day was, that Paowang being at dinner with us on board, I took the opportunity to show him several parts of the ship, and various articles, in hopes of finding out something which they might value, and be induced to take from us in exchange for refreshments; for what we got of this kind was trifling. But he looked on every thing that was shown him with the utmost indifference; nor did he take notice of any one thing except a wooden sand-box, which he seemed to admire, and turned two or three times over in his hand.

Next morning, after breakfast, a party of us set out for the country, to try if we could not get a nearer and better view of the volcano. We went by the way of one of those hot smoking places before mentioned, and dug a hole in the hottest part, into which a thermometer of Fahrenheit's construction was put; and the mercury presently rose to 100°. It remained in the hole two minutes and a half without either rising or falling. The earth about this place was a kind of white clay, had a sulphureous smell, and was soft and wet, the surface only excepted, over which was spread a thin dry crust, that had upon it some sulphur, and a vitriolic substance, tasting like alum. The place affected by the heat was not above

eight or ten yards square; and near it were some fig-trees, which spread their branches over a part of it, and seemed to like their situation. We thought that this extraordinary heat was caused by the steam of boiling water, strongly impregnated with sulphur. I was told that some of the other places were larger than this; though we did not go out of the road to look at them, but proceeded up the hill through a country so covered with trees, shrubs, and plants, that the bread-fruit and cocoa-nut trees, which seem to have been planted here by nature, were in a manner choked up. Here and there we met with a house, some few people, and plantations. These latter we found in different states; some of long standing; others lately cleared; and some only clearing, and before any thing had been planted. The clearing a piece of ground for a plantation seemed to be a work of much labour, considering the tools they had to work with, which, though much inferior to those at the Society Isles, are of the same kind. Their method is, however, judicious, and as expeditious as it can well be. They lop off the small branches of the large trees, dig under the roots, and there burn the branches and small shrubs and plants which they root up. The soil, in some parts, is a rich black mould; in other parts, it seemed to be composed of decayed vegetables, and of the ashes the volcano sends forth throughout all its neighbourhood. Happening to turn out of the common path, we came into a plantation, where we found a man at work, who, either out of good-nature, or to get us the sooner out of his territories, undertook to be our guide. We followed him accordingly, but had not gone far before we came to the junction of two roads, in one of which stood another man with a sling and a stone, which he thought proper to lay down when a musket was pointed at him. The attitude in which we found him, the ferocity appearing in his looks, and his behaviour after, convinced us that he meant

to defend the path he stood in. He, in some measure, gained his point; for our guide took the other road, and we followed; but not without suspecting he was leading us out of the common way. The other man went with us likewise, counting us several times over, and hallooing, as we judged, for assistance; for we were presently joined by two or three more, among whom was a young woman with a club in her hand. By these people we were conducted to the brow of a hill, and shown a road leading down to the harbour, which they wanted us to take. Not choosing to comply, we returned to that we had left, which we pursued alone, our guide refusing to go with us. After ascending another ridge, as thickly covered with wood as those we had come over, we saw yet other hills between us and the volcano, which seemed as far off as at our first setting out. This discouraged us from proceeding farther, especially as we could get no one to be our guide. We therefore came to a resolution to return; and had but just put this in execution, when we met between twenty and thirty people, whom the fellow before mentioned had collected together, with a design, as we judged, to oppose our advancing into the country; but as they saw us returning, they suffered us to pass unmolested. Some of them put us into the right road, accompanied us down the hill, made us stop by the way to entertain us with cocoa-nuts, plantains, and sugar-cane; and what we did not eat on the spot, they brought down the hill with us. Thus, we found these people hospitable, civil, and good-natured, when not prompted to a contrary conduct by jealousy; a conduct I cannot tell how to blame them for, especially when I consider the light in which they must view us. It was impossible for them to know our real design; we enter their ports without their daring to oppose; we endeavour to land in their country as friends, and it is well if this succeeds; we land, nevertheless, and maintain the

footing we have got, by the superiority of our fire-arms. Under such circumstances, what opinion are they to form of us? Is it not as reasonable for them to think that we come to invade their country, as to pay them a friendly visit? Time, and some acquaintance with us, can only convince them of the latter. These people are yet in a rude state; and, if we may judge from circumstances and appearances, are frequently at war, not only with their neighbours, but among themselves; consequently must be jealous of every new face. I will allow there are some exceptions to this rule to be found in this sea; but there are few nations who would willingly suffer visitors like us to advance far into their country.

Before this excursion, some of us had been of opinion, that these people were addicted to an unnatural passion, because they had endeavoured to entice some of our men into the woods; and, in particular, I was told, that one who had the care of Mr. Forster's plant bag, had been, once or twice, attempted. As the carrying of bundles, &c. is the office of the women in this country, it had occurred to me, and I was not singular in this, that the natives might mistake him, and some others, for women. My conjecture was fully verified this day: for this man, who was one of the party, and carried the bag as usual, following me down the hill, by the words which I understood of the conversation of the natives, and by their actions, I was well assured that they considered him as a female; till, by some means, they discovered their mistake, on which they cried out, *Erramange! Erramange!* It's a man! It's a man! The thing was so palpable that every one was obliged to acknowledge, that they had before mistaken his sex; and that, after they were undeceived, they seemed not to have the least notion of what we had suspected. This circumstance will show how liable we are to form wrong conjectures of things, among people whose language we are ignorant of. Had it

not been for this discovery, I make no doubt that these people would have been charged with this vile custom.

In the evening I took a walk, with some of the gentlemen, into the country on the other side of the harbour, where we had very different treatment from what we had met with in the morning. The people we now visited, among whom was our friend Paowang, being better acquainted with us, showed a readiness to oblige us in every thing in their power. We came to the village which had been visited on the 9th. It consisted of about twenty houses, the most of which need no other description than comparing them to the roof of a thatched house in England taken off the walls and placed on the ground. Some were open at both ends; others partly closed with reeds; and all were covered with palm thatch. A few of them were thirty or forty feet long, and fourteen or sixteen broad. Besides these, they have other mean hovels, which, I conceived, were only to sleep in. Some of these stood in a plantation, and I was given to understand, that in one of them lay a dead corpse. They made signs that described sleep, or death; and circumstances pointed out the latter. Curious to see all I could, I prevailed on an elderly man to go with me to the hut, which was separated from the others by a reed fence, built quite round it, at the distance of four or five feet. The entrance was by a space in the fence, made so low as to admit one to step over. The two sides and one end of the hut were closed or built up in the same manner, and with the same materials, as the roof. The other end had been open, but was now well closed up with mats, which I could not prevail on the man to remove, or suffer me to do it. There hung at this end of the hut a matted bag or basket, in which was a piece of roasted yam, and some sort of leaves, all quite fresh. I had a strong desire to see the inside of the hut, but the man was peremptory in refusing this, and even showed an un-

willingness to permit me to look into the basket. He wore round his neck, fastened to a string, two or three locks of human hair; and a woman present had several about her neck. I offered something in exchange for them; but they gave me to understand they could not part with them, as it was the hair of the person who lay in the hut. Thus I was led to believe, that these people dispose of their dead in a manner similar to that of Otaheite. The same custom of wearing the hair is observed by the people of that island, and also by the New Zealanders. The former make *Tamau* of the hair of their deceased friends, and the latter make ear-rings and necklaces of their teeth.

Near most of their large houses were fixed upright in the ground the stems of four cocoa-nut trees, in a square position, about three feet from each other. Some of our gentlemen, who first saw them, were inclined to believe they were thus placed on a religious account; but I was now satisfied that it was for no other purpose but to hang cocoa-nuts on to dry. For when I asked, as well as I could, the use of them, a man took me to one, loaded with cocoa-nuts from the bottom to the top; and no words could have informed me better. Their situation is well chosen for this use, as most of their large houses are built in an open airy place, or where the wind has a free passage, from whatever direction it blows. Near most, if not all of them, is a large tree, or two, whose spreading branches afford an agreeable retreat from the scorching sun. This part of the island was well cultivated, open and airy; the plantations were laid out by line, abounding with plantains, sugar-canes, yams, and other roots, and stocked with fruit trees. In our walk we met with our old friend Paowang, who, with some others, accompanied us to the water-side, and brought with them, as a present, a few yams and cocoa-nuts.

On the 15th, having finished wooding and watering,

a few hands only were on shore making brooms, the rest being employed on board, setting up the rigging, and putting the ship in a condition for sea. Mr. Forster, in his botanical excursion this day, shot a pigeon, in the craw of which was a wild nutmeg. He took some pains to find the tree, but his endeavours were without success. In the evening a party of us walked to the eastern sea-shore, in order to take the bearing of Annattom, and Erronan or Foottoona. The horizon proved so hazy that I could see neither; but one of the natives gave me, as I afterwards found, the true direction of them. We observed that in all, or most of their sugar plantations, were dug holes or pits, four feet deep, and five or six in diameter, and on our inquiring their use, we were given to understand, that they caught rats in them. These animals, which are very destructive to the canes, are here in great plenty. The canes, I observed, were planted as thick as possible round the edge of these pits, so that the rats in coming at them are the more liable to tumble in.

Next morning we found the tiller sprung in the rudder-head, and by some strange neglect, we had not a spare one on board, which we were ignorant of till now it was wanting. I knew but of one tree in the neighbourhood fit for this purpose, which I sent the carpenter on shore to look at, and an officer, with a party of men, to cut it down, provided he could obtain leave of the natives; if not, he was ordered to acquaint me. He understood that no one had any objection, and set the people to work accordingly. But as the tree was large, this required some time; and, before it was down, word was brought me that our friend Paowang was not pleased. Upon this I gave orders to desist, as we found that, by scarfing a piece to the inner end of the tiller, and letting it farther into the rudder-head, it would still perform its office. But, as it was necessary to have a spare one on board, I went on shore, sent for Paowang,

made him a present of a dog and a piece of cloth, and then explained to him that our great steering paddle was broken, and that I wanted that tree to make a new one. It was easy to see how well pleased every one present was with the means I took to obtain it. With one voice they gave their consent, Paowang joining his also, which he perhaps could not have done without the others; for I do not know that he had either more property or more authority than the rest. This point being obtained, I took our friend on board to dinner, and after it was over went with him on ashore, to pay a visit to an old chief, who was said to be king of the island, which was a doubt with me. Paowang took little or no notice of him. I made him a present, after which he immediately went away, as if he had got all he came for. His name was Geogy, and they gave him the title of *Areeke*. He was very old, but had a merry open countenance. He wore round his waist a broad red and white checquered belt, the materials and manufacture of which seemed the same as that of Otaheite cloth; but this was hardly a mark of distinction. He had with him a son, not less than forty-five or fifty years of age. A great number of people were at this time at the landing-place; most of them from distant parts. The behaviour of many was friendly, while others were daring and insolent, which I thought proper to put up with, as our stay was nearly at an end.

On the 17th, about ten o'clock, I went ashore, and found in the crowd old Geogy and his son, who soon made me understand that they wanted to dine with me; and accordingly I brought them, and two more on board. They all called them *Areekees* (or kings); but I doubt if any of them had the least pretensions to that title over the whole island. It had been remarked that one of these kings had not authority enough to order one of the people up into a cocoa-nut tree to bring him down some nuts. Although

he spoke to several, he was at last obliged to go himself, and by way of revenge, as it was thought, left not a nut on the tree, taking what he wanted himself, and giving the rest to some of our people.

When I got them on board, I went with them all over the ship, which they viewed with uncommon surprise and attention. We happened to have for their entertainment a kind of pie or pudding made of plantains, and some sort of greens which we had got from one of the natives. On this, and on yams, they made a hearty dinner; for, as to the salt beef and pork, they would hardly taste them. In the afternoon, having made each of them a present of a hatchet, a spike-nail, and some medals, I conducted them ashore.

Mr. Forster and I then went over to the other side of the harbour, and having tried, with Fahrenheit's thermometer, the head of one of the hot springs, we found that the mercury rose to 191°. At this time the tide was up within two or three feet of the spring, so that we judged it might, in some degree, be cooled by it. We were mistaken, however; for, on repeating the experiment next morning, when the tide was out, the mercury rose no higher than 187°; but, at another spring, where the water bubbled out of the sand from under the rock at the S. W. corner of the harbour, the mercury, in the same thermometer, rose to 202° ½, which is but little colder than boiling water. The hot places before mentioned are from about three to four hundred feet perpendicular above these springs, and on the slope of the same ridge with the volcano; that is, there are no vallies between them but such as are formed in the ridge itself; nor is the volcano on the highest part of the ridge, but on the S. E. side of it. This is, I have been told, contrary to the general opinion of philosophers, who say that volcanos must be on the summits of the highest hills. So far is this from being the case on this island, that some of its hills are more than

double the height of that on which the volcano is, and close to it. To these remarks I must add, that, in wet or moist weather, the volcano was most violent. There seems to be room for some philosophical reasoning on these phænomena of nature; but not having any talent that way, I must content myself with stating facts as I found them, and leave the causes to men of more abilities.

The tiller was now finished; but as the wind was unfavourable for sailing, the guard was sent on shore on the 19th, as before, and a party of men to cut up and bring off the remainder of the tree from which we had got the tiller. Having nothing else to do, I went on shore with them, and finding a good number of the natives collected about the landing-place as usual, I distributed among them all the articles I had with me, and then went on board for more. In less than an hour I returned, just as our people were getting some large logs into the boat. At the same time four or five of the natives stepped forward to see what we were about, and as we did not allow them to come within certain limits, unless to pass along the beech, the sentry ordered them back, which they readily complied with. At this time, having my eyes fixed on them, I observed the sentry present his piece (as I thought at these men), and was just going to reprove him for it, because I had observed that, whenever this was done, some of the natives would hold up their arms, to let us see they were equally ready. But I was astonished beyond measure when the sentry fired, for I saw not the least cause. At this outrage most of the people fled: it was only a few I could prevail on to remain. As they ran off, I observed one man to fall; and he was immediately lifted up by two others who took him into the water, washed his wound, and then led him off. Presently after, some came and described to me the nature of his wound; and, as I found he was not carried far, I sent for the surgeon. As soon as he arrived, I

went with him to the man, whom we found expiring. The ball had struck his left arm, which was much shattered, and then entered his body by the short-ribs, one of which was broken. The rascal who fired pretended that a man had laid an arrow across his bow, and was going to shoot at him, so that he apprehended himself in danger. But this was no more than they had always done, and with no other view than to show they were armed as well as we; at least I have reason to think so, as they never went farther. What made this incident the more unfortunate, was, it not appearing to be the man who bent the bow that was shot, but one who stood by him. This affair threw the natives into the utmost consternation; and the few that were prevailed on to stay ran to the plantations and brought cocoa-nuts, &c. which they laid down at our feet. So soon were these daring people humbled! When I went on board to dinner they all retired, and only a few appeared in the afternoon, amongst whom were Paowang and Wha-a-gou. I had not seen this young man since the day he dined on board. Both he and Paowang promised to bring me fruit, &c. the next morning, but our early departure put it out of their power.

CHAP. VI.

DEPARTURE FROM TANNA; WITH SOME ACCOUNT OF ITS INHABITANTS, THEIR MANNERS AND ARTS.

During the night the wind had veered round to S. E. As this was favourable for getting out of the harbour, at four o'clock in the morning of the 20th, we began to unmoor, and at eight, having weighed our last anchor, put to sea. As soon as we were clear of the land, I brought to, waiting for the launch which was left behind to take up a kedge-anchor and hawser we had out, to cast by. About day-break a noise was heard in the woods, nearly abreast of us, on the east side of the harbour, not unlike singing of psalms. I was told that the like had been heard at the same time every morning, but it never came to my knowledge till now, when it was too late to learn the occasion of it. Some were of opinion, that at the east point of the harbour (where we observed, in coming in, some houses, boats, &c.) was something sacred to religion, because some of our people had attempted to go to this point, and were prevented by the natives. I thought, and do still think, it was only owing to a desire they showed, on every occasion, of fixing bounds to our excursions. So far as we had once been, we might go again; but not farther with their consent. But by encroaching a little every time, our country expeditions were insensibly extended without giving the least umbrage. Besides, these morning ceremonies, whether religious or not, were not performed down at that point, but in a part where some of our people had been daily.

I cannot say what might be the true cause of these people showing such dislike to our going up into their country. It might be owing to a naturally jealous disposition, or perhaps to their being accustomed to

hostile visits from their neighbours, or quarrels among themselves. Circumstances seemed to show that such must frequently happen; for we observed them very expert in arms, and well accustomed to them; seldom or never travelling without them. It is possible all this might be on our account; but I hardly think it. We never gave them the least molestation, nor did we touch any part of their property, not even the wood and water, without first having obtained their consent. The very cocoa-nuts, hanging over the heads of the workmen, were as safe as those in the middle of the island. It happened, rather fortunately, that there were so many cocoa-nut trees near the skirts of the harbour, which seemed not to be private property; so that we could generally prevail on the natives to bring us some of these nuts, when nothing would induce them to bring any out of the country.

We were not wholly without refreshments; for besides the fish, which our seine now and then provided us with, we procured daily some fruits or roots from the natives, though but little in proportion to what we could consume. The reason why we got no more might be our having nothing to give them in exchange, which they thought valuable. They had not the least knowledge of iron; consequently, nails and iron tools, beads, &c. which had so great a run at the more eastern isles, were of no consideration here; and cloth can be of no use to people who go naked.

The produce of this island is bread-fruit, plantains, cocoa-nuts, a fruit like a nectarine, yams, terra, a sort of potatoe, sugar-cane, wild figs, a fruit like an orange, which is not eatable, and some other fruit and nuts whose names I have not. Nor have I any doubt that the nutmeg before mentioned was the produce of this island. The bread-fruit, cocoa-nuts, and plantains, are neither so plentiful nor so good as at Otaheite; on the other hand, sugar-canes and yams

are not only in greater plenty, but of superior quality, and much larger. We got one of the latter which weighed fifty-six pounds, every ounce of which was good. Hogs did not seem to be scarce; but we saw not many fowls. These are the only domestic animals they have. Land birds are not more numerous than at Otaheite, and the other islands; but we met with some small birds, with a very beautiful plumage, which we had never seen before. There is as great a variety of trees and plants here as at any island we touched at, where our botanists had time to examine. I believe these people live chiefly on the produce of the land, and that the sea contributes but little to their subsistence. Whether this arises from the coast not abounding with fish, or from their being bad fishermen, I know not; both causes perhaps concur. I never saw any sort of fishing-tackle amongst them, nor any one out fishing, except on the shoals, or along the shores of the harbour, where they would watch to strike with a dart such fish as came within their reach; and in this they were expert. They seemed much to admire our catching fish with the seine; and, I believe, were not well pleased with it at last. I doubt not they have other methods of catching fish besides striking them.

We understood that the little isle of Immer was chiefly inhabited by fishermen, and that the canoes we frequently saw pass, to and from that isle and the east point of the harbour, were fishing canoes. These canoes were of unequal sizes, some thirty feet long, two broad, and three deep, and they are composed of several pieces of wood clumsily sewed together with bandages. The joints are covered on the outside by a thin batten champhered off at the edges, over which the bandages pass. They are navigated either by paddles or sails. The sail is latteen, extended to a yard and boom, and hoisted to a short mast. Some of the large canoes have two sails, and all of them outriggers.

At first we thought the people of this island, as well as those of Erromango, were a race between the natives of the Friendly Islands and those of Mallicollo; but a little acquaintance with them convinced us that they had little or no affinity to either, except it be in their hair, which is much like what the people of the latter island have. The general colours of it are black and brown, growing to a tolerable length, and very crisp and curly. They separate it into small locks, which they woold or cue round with the rind of a slender plant, down to about an inch of the ends; and, as the hair grows, the woolding is continued. Each of these cues or locks is somewhat thicker than common whipcord; and they look like a parcel of small strings hanging down from the crown of their heads. Their beards, which are strong and bushy, are generally short. The women do not wear their hair so, but cropped; nor do the boys, till they approach manhood. Some few men, women, and children, were seen, who had hair like ours; but it was obvious that these were of another nation; and I think we understood they came from Erronan. It is to this island they ascribe one of the two languages which they speak, and which is nearly, if not exactly, the same as that spoken at the Friendly Isles. It is therefore more than probable that Erronan was peopled from that nation, and that, by long intercourse with Tanna and the other neighbouring islands, each hath learnt the other's language, which they use indiscriminately.

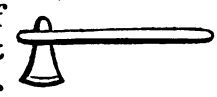
The other language which the people of Tanna speak, and, as we understood, those of Erromango and Annattom, is properly their own. It is different from any we had before met with, and bears no affinity to that of Mallicollo; so that, it should seem, the people of these islands are a distinct nation of themselves. Mallicollo, Apee, &c. were names entirely unknown to them; they even knew nothing of

Sandwich Island, which is much the nearer. I took no small pains to know how far their geographical knowledge extended; and did not find that it exceeded the limits of their horizon.

These people are of the middle size, rather slender than otherwise; many are little, but few tall or stout; the most of them have good features, and agreeable countenances; are, like all the tropical race, active and nimble; and seem to excel in the use of arms, but not to be fond of labour. They never would put a hand to assist in any work we were carrying on, which the people of the other islands used to delight in. But what I judge most from, is their making the females do the most laborious work, as if they were pack-horses. I have seen a woman carrying a large bundle on her back, or a child on her back and a bundle under her arm, and a fellow strutting before her with nothing but a club or spear, or some such thing. We have frequently observed little troops of women pass, to and fro, along the beach, laden with fruit and roots, escorted by a party of men under arms; though, now and then, we have seen a man carry a burden at the same time, but not often. I know not on what account this was done, nor that an armed troop was necessary. At first, we thought they were moving out of the neighbourhood with their effects; but we afterwards saw them both carry out and bring in every day.

I cannot say the women are beauties; but I think them handsome enough for the men, and too handsome for the use that is made of them. Both sexes are of a very dark colour, but not black; nor have they the least characteristic of the negro about them. They make themselves blacker than they really are, by painting their faces with a pigment of the colour of black lead. They also use another sort which is red, and a third sort brown, or a colour between red and black. All these, but especially the first, they lay on, with a liberal hand, not only on the face, but

on the neck, shoulders, and breast. The men wear nothing but a belt, and the wrapping leaf as at Mallicollo.* The women have a kind of petticoat made of the filaments of the plantain tree, flags, or some such thing, which reaches below the knee. Both sexes wear ornaments, such as bracelets, ear-rings, necklaces, and amulets. The bracelets are chiefly worn by the men; some made of sea-shells, and others of those of the cocoa-nut. The men also wear amulets; and those of most value being made of a greenish stone, the green stone of New Zealand is valued by them for this purpose. Necklaces are chiefly used by the women, and made mostly of shells. Ear-rings are common to both sexes, and those vavued most are made of tortoise-shell. Some of our people having got some at the Friendly Islands, brought it to a good market here, where it was of more value than any thing we had besides; from which I conclude that these people catch but few turtle, though I saw one in the harbour, just as we were getting under sail. I observed that, towards the latter end of our stay, they began to ask for hatchets, and large nails; so that it is likely they had found that iron is more serviceable than stone, stone, or shells, of which all their tools I have seen are made. Their stone hatchets, at least all those I saw, are not in the shape of adzes, as at the other islands, but more like an axe, in this form.



In the helve, which is pretty thick, is made a hole into which the stone is fixed.

These people, besides the cultivation of ground, have few other arts worth mentioning. They know how to make a coarse kind of matting, and a coarse cloth of the bark of a tree, which is used chiefly for belts. The workmanship of their canoes, I have before observed, is very rude; and their arms,

* See the note, p. 32.

with which they take the most pains in point of neatness, come far short of some others we had seen. Their weapons are clubs, spears, or darts, bows and arrows, and stones. The clubs are of three or four kinds, and from three to five feet long. They seem to place most dependence on the darts, which are pointed with three bearded edges. In throwing them they make use of a becket, that is, a piece of stiff plaited cord about six inches long, with an eye in one end and a knot at the other. The eye is fixed on the fore-finger of the right hand, and the other end is hitched round the dart, where it is nearly on an equipoise. They hold the dart between the thumb and remaining fingers, which serve only to give it direction, the velocity being communicated by the becket and fore-finger. The former flies off from the dart the instant its velocity becomes greater than that of the hand, but it remains on the finger ready to be used again. With darts they kill both birds and fish, and are sure of hitting a mark, within the compass of the crown of a hat, at the distance of eight or ten yards; but, at double that distance, it is chance if they hit a mark the size of a man's body, though they will throw the weapon sixty or seventy yards. They always throw with all their might, let the distance be what it will. Darts, bows and arrows, are to them what muskets are to us. The arrows are made of reeds pointed with hard wood: some are bearded and some not, and those for shooting birds have two, three, and sometimes four points. The stones they use are, in general, the branches of coral rocks from eight to fourteen inches long, and from an inch to an inch and a half in diameter. I know not if they employ them as missive weapons; almost every one of them carries a club, and besides that, either darts, or a bow and arrows, but never both: those who had stones kept them generally in their belts.

I cannot conclude this account of their arms with-

out adding an entire passage out of Mr. Wales's journal. As this gentleman was continually on shore amongst them, he had a better opportunity of seeing what they could perform than any of us. The passage is as follows: "I must confess I have been often "led to think the feats which Homer represents his "heroes as performing with their spears a little too "much of the marvellous to be admitted into an "heroic poem; I mean when confined within the "streight stays of Aristotle. Nay, even so great "an advocate for him as Mr. Pope acknowledges "them to be *surprising*. But since I have seen "what these people can do with their wooden spears, "and them badly pointed, and not of a very hard "nature, I have not the least exception to any "one passage in that great poet on this account. "But, if I see fewer exceptions, I can find infinitely "more beauties in him; as he has, I think, scarce "an action, circumstance, or description of any "kind whatever, relating to a spear, which I have "not seen and recognised among these people; as "their whirling motion, and whistling noise, as they "fly; their quivering motion, as they stick in the "ground when they fall; their meditating their aim, "when they are going to throw; and their shaking "them in their hand as they go along, &c. &c."

I know no more of their cookery, than that it consists of roasting and baking; for they have no vessel in which water can be boiled. Nor do I know that they have any other liquor but water and the juice of the cocoa-nut.

We are utter strangers to their religion; and but little acquainted with their government. They seem to have chiefs among them; at least some were pointed out to us by that title; but, as I before observed, they appeared to have very little authority over the rest of the people. Old Geogy was the only one the people were ever seen to take the least notice of; but whether this was owing to high rank

or old age I cannot say. On several occasions I have seen the old men respected and obeyed. Our friend Paowang was so; and yet I never heard him called chief, and have many reasons to believe that he had not a right to any more authority than many of his neighbours, and few, if any, were bound to obey him, or any other person in our neighbourhood; for if there had been such a one, we certainly should, by some means, have known it. I named the harbour Port Resolution, after the ship, she being the first which ever entered it. It is situated on the north side of the most eastern point of the island, and about E. N. E. from the volcano; in the latitude of 19° 32′ 25″½ South, and in the longitude of 169° 44′ 35″ East. It is no more than a little creek running in S. by W. ½ W. three quarters of a mile, and is about half that in breadth. A shoal of sand and rocks lying on the east side makes it still narrower. The depth of water in the harbour is from six to three fathoms, and the bottom is sand and mud. No place can be more convenient for taking in wood and water; for both are close to the shore. The water stunk a little after it had been a few days on board, but it afterwards turned sweet; and, even when it was at the worst, the tin machine would, in a few hours, recover a whole cask. This is an excellent contrivance for sweetening water at sea, and is well known in the navy.

Mr. Wales, from whom I had the latitude and longitude, found the variation of the needle to be 7° 14′ 12″ East, and the dip of its south end 45° 2½′. He also observed the time of high water, on the full and change days, to be about 5 h. 45m., and the tide to rise and fall three feet.

CHAP. VII.

THE SURVEY OF THE ISLANDS CONTINUED, AND A MORE PARTICULAR DESCRIPTION OF THEM.

As soon as the boats were hoisted in, we made sail, and stretched to the eastward, with a fresh gale at S. E., in order to have a nearer view of Erronan, and to see if there was any land in its neighbourhood. We stood on till midnight, when, having passed the island, we tacked, and spent the remainder of the night making two boards. At sunrise on the 21st, we stood to S. W. in order to get to the south of Tanna, and nearer to Annattom, to observe if any more land lay in that direction; for an extraordinary clear morning had produced no discovery of any to the east. At noon having observed in latitude 20° 33′ 30″, the situation of the lands around us was as follows. Port Resolution bore 86° West, distant six and a half leagues; the island of Tanna extended from S. 88° West, to N. 64° West; Traitor's Head N. 58° West, distant twenty leagues; the island of Erronan N. 86° East, distant five leagues; and Annattom from S. ½ E. to S ½ W. distant ten leagues. We continued to stretch to the south till two o'clock P. M. when, seeing no more land before us, we bore up round the S. E. end of Tanna; and, with a fine gale at E. S. E. ran along the south coast at one league from shore. It seemed a bold one, without the guard of any rocks; and the country full as fertile as in the neighbourhood of the harbour, and making a fine appearance. At six o'clock the high land of Erromango appeared over the west end of Tanna in the direction of N. 16° West; at eight o'clock we were past the island, and steered N.N.W. for Sandwich Island, in order to finish the survey * of

* The word Survey is not here to be understood in its literal sense. Surveying a place, according to my idea, is taking a geometrical plan of it, in which every place is to have its true situation, which cannot be done in a work of this nature.

it, and of the isles to the N. W. On the 22d, at four o'clock P. M., we drew near the S. E. end, and ranging the south coast, found it to trend in the direction of West and W.N.W. for about nine leagues. Near the middle of this length, and close to the shore, are three or four small isles, behind which seemed to be a safe anchorage. But not thinking I had any time to spare to visit this fine island, I continued to range the coast to its western extremity, and then steered N. N. W. for the S. E. end of Mallicollo, which, at half past six o'clock next morning, bore N. 14° East, distant seven or eight leagues, and Three-Hills Island S. 82° East. Soon after, we saw the islands Apee, Paoom, and Ambrym. What we had comprehended under the name of Paoom appeared now to be two isles, something like a separation being seen between the hill and the land to the west of it. We approached the S. W. side of Mallicollo to within half a league, and ranged it at that distance. From the S. E. point, the direction of the land is west, a little southerly, for six or seven leagues, and then N. W. by W. three leagues, to a pretty high point or head-land, situated in latitude 16° 29′, and which obtained the name of South-West Cape. The coast, which is low, seemed to be indented into creeks and projecting points; or else, these points were small isles lying under the shore. We were sure of one, which lies between two and three leagues east of the Cape. Close to the west side or point of the Cape lies, connected with it by breakers, a round rock or islet, which helps to shelter a fine bay, formed by an elbow in the coast, from the reigning winds.

The natives appeared in troops on many parts of the shore, and some seemed desirous to come off to us in canoes; but they did not; and, probably, our not shortening sail was the reason. From the South-West Cape, the direction of the coast is N. by W., but the most advanced land bore from it N. W. by N. at which the land seemed to terminate. Continuing to follow the direction of

the coast, at noon it was two miles from us; and our latitude, by observation, was 16° 22′ 30″ South. This is nearly the parallel to Port Sandwich, and our never-failing guide, the watch, showed that we were 26′ W. of it; a distance which the breadth of Mallicollo cannot exceed in this parallel. The South-West Cape bore S. 26° East, distant seven miles; and the most advanced point of land, for which we steered, bore N. W. by N. At three o'clock, we were the length of it, and found the land continued, and trending more and more to the north. We coasted it to its northern extremity, which we did not reach till after dark, at which time we were near enough the shore to hear the voices of people, who were assembled round a fire they had made on the beach. There we sounded, and found twenty fathoms and a bottom of sand; but, on edging off from the shore, we soon got out of sounding, and then made a trip back to the south till the moon got up. After this we stood again to the north, hauled round the point, and spent the night in Bougainville's passage; being assured of our situation before sunset, by seeing the land, on the north side of the passage, extending as far as N. W. ½ W.

The south coast of Mallicollo, from the S. E. end to the S. W. Cape, is luxuriantly clothed with wood, and other productions of nature, from the sea-shore to the very summits of the hills. To the N. W. of the Cape the country is less woody, but more agreeably interspersed with lawns, some of which appeared to be cultivated. The summits of the hills seemed barren; and the highest lies between Port Sandwich and the S. W. Cape. Farther north, the land falls insensibly lower, and is less covered with wood. I believe it is a very fertile island, and well inhabited; for we saw smoke by day, and fire by night, in all parts of it.

Next morning at sunrise, we found ourselves nearly in the middle of the passage, the N. W. end

of Mallicollo extending from S. 30° East, to S. 58° West; the land to the north from N. 70° West, to N. 4° East; and the Isle of Lepers bearing N. 30° East, distant eleven or twelve leagues. We now made sail, and steered N. by E., and afterwards north, along the east coast of the northern land, with a fine breeze at S. E. We found that this coast, which at first appeared to be continued, was composed of several low woody isles, the most of them of small extent, except the southernmost, which, on account of the day, I named St. Bartholomew. It is six or seven leagues in circuit, and makes the N. E. point of Bougainville's Passage. At noon the breeze began to slacken. We were, at this time, between two and three miles from the land, and observed, in latitude 15° 23′, the Isle of Lepers bearing from E. by N. to E. by S., distant seven leagues; and an high bluff-head, at which the coast we were upon seemed to terminate, N. N. W. ½ W., distant ten or eleven leagues; but from the mast-head we could see land to the east. This we judged to be an island, and it bore N. by W. ½ W.

As we advanced to N. N. W. along a fine coast, covered with woods, we perceived low land that extended off from the bluff-head towards the island above mentioned, but did not seem to join it. It was my intention to have gone through the channel, but the approach of night made me lay it aside, and steer without the island. During the afternoon we passed some small isles lying under the shore; and observed some projecting points of unequal height, but were not able to determine whether or no they were connected with the main land. Behind them was a ridge of hills which terminated at the bluff-head. There were cliffs, in some places of the coast, and white patches, which we judged to be chalk. At ten o'clock, being the length of the isle which lies off the head, we shortened sail, and spent the night making short boards.

At day-break, on the 25th, we were on the north

side of the island (which is of a moderate height, and three leagues in circuit), and steered west for the bluff-head along the low land under it. At sunrise an elevated coast came in sight beyond the bluff-head, extending to the north as far as N. W. by W. After doubling the head we found the land to trend south, a little easterly, and to form a large, deep bay, bounded on the west by the coast just mentioned.

Every thing conspired to make us believe this was the bay of St. Philip and St. Jago, discovered by Quiros in 1606. To determine this point it was necessary to proceed farther up; for at this time we saw no end to it. The wind being at south, we were obliged to ply, and first stretched over for the west shore, from which we were three miles at noon, when our latitude was 14° 55′ 30″ South, longitude 167° 3′ East; the mouth of the bay extending from N. 64° West to S. 86° East, which last direction was the bluff-head, distant three leagues. In the afternoon, the wind veering to E. S. E., we could look up to the head of the bay; but as the breeze was faint, a N. E. swell hurled us over to the west shore; so that, at half past four o'clock P. M. we were no more than two miles from it, and tacked in one hundred and twenty fathoms water, a soft muddy bottom. The bluff-head, or east point of the bay, bore N. 53° East.

We had no sooner tacked than it fell calm, and we were left to the mercy of the swell, which continued to hurtle us towards the shore, where large troops of people wese assembled. Some ventured off in two canoes; but all the signs of friendship we could make, did not induce them to come along-side, or near enough to receive any present from us. At last they took sudden fright at something, and returned ashore. They were naked, except having some long grass, like flags, fastened to a belt, and hanging down before and behind, nearly as low as the knee. Their colour was very dark, and their hair woolly; or cut short, which made it seem so. The canoes were

small, and had out-riggers. The calm continued till near eight o'clock, in which time we drove into eighty-five fathoms water, and so near the shore, that I expected we should be obliged to anchor. A breeze of wind sprung up at E. S. E., and first took us on the wrong side; but, contrary to all our expectations, and when we had hardly room to veer, the ship came about, and having filled on the starboard tack, we stood off N. E. Thus we were relieved from the apprehensions of being forced to anchor in a great depth, on a lee shore, and in a dark and obscure night.

We continued to ply upwards, with variable light breezes between E. S. E. and S., till ten next morning, when it fell calm. We were, at this time, about seven or eight miles from the head of the bay, which is terminated by a low beach; and behind that is an extensive flat covered with wood, and bounded on each side by a ridge of mountains. At noon we found the latitude to be 15° 5′ South, and were detained here by the calm till one o'clock P. M., when we got a breeze at N. by W., with which we steered up to within two miles of the head of the bay; and then I sent Mr. Cooper and Mr. Gilbert to sound and reconnoitre the coast, while we stood to and fro with the ship. This gave time to three sailing canoes, which had been following us some time, to come up. There were five or six men in each; and they approached near enough to receive such things as were thrown to them fastened to a rope, but would not advance along-side. They were the same sort of people as those we had seen the preceding evening; indeed we thought they came from the same place. They seemed to be stouter and better shaped men than those of Mallicollo; and several circumstances concurred to make us think they were of another nation. They named the numerals as far as five or six, in the language of Anamocka, and understood us when we asked the names of the adjacent lands

in that language. Some, indeed, had black short frizzled hair, like the natives of Mallicollo; but others had it long, tied up on the crown of the head, and ornamented with feathers, like the New Zealanders. Their other ornaments were bracelets and necklaces; one man had something like a white shell on his forehead; and some were painted with a blackish pigment. I did not see that they had any other weapon but darts and gigs, intended only for striking of fish. Their canoes were much like those of Tanna, and navigated in the same manner, or nearly so. They readily gave us the names of such parts as we pointed to: but we could not obtain from them the name of the island. At length, seeing our boats coming, they paddled in for the shore, notwithstanding all we could say or do to detain them.

When the boats returned, Mr. Cooper informed me, that they had landed on the beach which is at the head of the bay, near a fine river, or stream of fresh water, so large and deep, that they judged boats might enter it at high water. They found three fathoms depth close to the beach, and fifty-five and fifty, two cables' length off. Farther out they did not sound; and where we were with the ship we had no soundings with an hundred and seventy fathoms line. Before the boats got on board, the wind had shifted to S. S. E. As we were in want of nothing, and had no time to spare, I took the advantage of this shift of wind, and steered down the bay. During the fore-part of the night, the country was illuminated with fires, from the sea-shore to the summits of the mountains; but this was only on the west side of the shore. I cannot pretend to say what was the occasion of these fires, but have no idea of their being on our account. Probably they were burning or clearing the ground for new plantations. At day-break, on the 27th, we found ourselves two-thirds down the bay; and, as we had but little wind, it was noon before we were the length of the N. W.

point, which at this time bore N. 82° West, distant five miles. Latitude observed, 14° 39′ 30″.

Some of our gentlemen were doubtful of this being the bay of St. Philip and St. Jago, as there was no place which they thought could mean the port of Vera Cruz. For my part, I found general points to agree so well with Quiros's description, that I had not the least doubt about it. As to what he calls the port of Vera Cruz, I understand that to be the anchorage at the head of the bay, which in some places may extend farther off than where our boats landed. There is nothing in his account of the port which contradicts this supposition. * It was but natural for his people to give a name to the place, independent of so large a bay, where they lay so long at anchor. A port is a vague term, like many others in geography, and has been very often applied to places far less sheltered than this.

Our officers observed that grass and other plants grew on the beach close to high-water mark; which is always a sure sign of pacific anchorage, and an undeniable proof that there never is a great surf on the shore. They judged that the tide rose about four or five feet, and that boats and such craft might, at high water, enter the river, which seemed to be pretty deep and broad within; so that this, probably, is one of those mentioned by Quiros; and, if we were not deceived, we saw the other.

The bay hath twenty leagues sea-coast; six on the east side, which lies in the direction of S. ½ West and N. ½ East; two at the head, and twelve on the west side, the direction of which is S. by E. and N. by W. from the head down to two-thirds of its length, and then N. W. by N. to the N. W. point. The two points which form the entrance lie in the direction of S. 53° East, and N. 53° West, from each

* See Quiros's Voyage, in Dalrymple's Collection, vol. i. p. 136, 137.

other distant ten leagues. The bay is every where free from danger, and of unfathomable depth, except near the shores, which are for the most part low. This, however, is only a very narrow strip between the sea-shore and the foot of the hills; for the bay, as well as the flat land at the head of it, is bounded on each side by a ridge of hills, one of which, that to the west, is very high and double, extending the whole length of the island. An uncommonly luxuriant vegetation was every where to be seen; the sides of the hills were chequered with plantations, and every valley watered by a stream. Of all the productions of nature this country was adorned with, the cocoa-nut trees were the most conspicuous. The columns of smoke we saw by day, and the fires by night, all over the country, led us to believe that it is well inhabited and very fertile. The east point of this bay, which I name Cape Quiros, in memory of its first discoverer, is situated in latitude 14° 56′ South, longitude 167° 13′ East. The N. W. point, which I named Cape Cumberland, in honour of his Royal Highness the Duke, lies in the latitude of 14° 38′ 45″ South, longitude 166° 49½′ East, and is the N. W. extremity of this archipelago; for, after doubling it, we found the coast to trend gradually round to the S. and S. S. E.

On the 28th and 29th we had light airs and calms, so that we advanced but little. In this time we took every opportunity, when the horizon was clearer than usual, to look out for more land; but none was seen. By Quiros's track to the north, after leaving the bay above mentioned, it seems probable that there is none nearer than Queen Charlotte's Island, discovered by Captain Carteret, which lies about ninety leagues N. N. W. from Cape Cumberland, and I take to be the same with Quiros's Santa Cruz.

On the 30th the calm was succeeded by a fresh breeze at S. S. E., which enabled us to ply up the coast. At noon we observed in 15° 20′; afterwards we

stretched in east, to within a mile of the shore, and then tacked, in seventy-five fathoms, before a sandy flat, on which several of the natives made their appearance. We observed, on the sides of the hills, several plantations that were laid out by line, and fenced round.

On the 31st, at noon, the S. or S. W. point of the island bore N. 62° East, distant four leagues. This forms the N. W. point of what I call Bougainville's Passage; the N. E. point, at this time, bore N. 85° East, and the N. W. end of Mollicollo from S. 54° East to S. 72° East. Latitude observed, 15° 45′ S. In the afternoon, in stretching to the east, we weathered the S. W. point of the island, from which the coast trends east northerly. It is low, and seemed to form some creeks or coves; and, as we got farther into the passage, we perceived some small low isles lying along it, which seemed to extend behind St. Bartholomew Island.

Having now finished the survey of the whole archipelago, the season of the year made it necessary for me to return to the south, while I had yet some time left to explore any land I might meet with between this and New Zealand; where I intended to touch, that I might refresh my people, and recruit our stock of wood and water for another southern course. With this view, at five P. M. we tacked, and hauled to the southward, with a fresh gale at S. E. At this time the N. W. point of the passage, or the S. W. point of the island Tierra del Espiritu Santo, the only remains of Quiros's continent, bore N. 82° West, distant three leagues. I named it Cape Lisburne, and its situation is in latitude 15° 40′, longitude 165° 59′ East.

The foregoing account of these islands, in the order in which we explored them, not being particular enough either as to situation or description, it may not be improper now to give a more accurate view of

them, which, with the annexed chart, will convey to the reader a better idea of the whole group.

The northern islands of this archipelago were first discovered by that great navigator, Quiros, in 1606; and, not without reason, were considered as part of the southern continent, which, at that time, and until very lately, was supposed to exist. They were next visited by M. de Bougainville, in 1768; who, besides landing on the Isle of Lepers, did no more than discover that the land was not connected, but composed of islands, which he called the Great Cyclades. But as, besides ascertaining the extent and situation of these islands, we added to them several new ones which were not known before, and explored the whole, I think we have obtained a right to name them; and shall in future distinguish them by the name of the New Hebrides. They are situated between the latitude of 14° 29′ and 20° 4′ South, and between 166° 41′ and 170° 21′ East longitude, and extend an hundred and twenty-five leagues in the direction of N. N. W. ½ West, and S. S. E. ½ East.

The most northern island is that called by M. de Bougainville Peak of the Etoile. It is situated, according to his account, in latitude 14° 29′, longitude 168° 9′; and, N. by W., eight leagues from Aurora.

The next island, which lies farthest north, is that of Tierra del Espiritu Santo. It is the most western and largest of all the Hebrides, being twenty-two leagues long, in the direction of N. N. W. ½ West, and S. S. E. ½ East, twelve in breadth, and sixty in circuit. We have obtained the true figure of this island very accurately. The land of it, especially the west side, is exceedingly high and mountainous; and, in many places, the hills rise directly from the sea. Except the cliffs and beaches, every other part is covered with wood, or laid out in plantations. Besides the bay of St. Philip and St. Jago, the isles which lie along the south and east coast, cannot, in

my opinion, fail of forming some good bays or harbours.

The next considerable island is that of Mallicollo, to the S. E. It extends N. W. and S. E., and is eighteen leagues long in that direction. Its greatest breadth, which is at the S. E. end, is eight leagues. The N. W. end is two-thirds this breadth; and nearer the middle, one-third. This contraction is occasioned by a wide and pretty deep bay on the S. W. side. To judge of this island from what we saw of it, it must be very fertile and well inhabited. The land on the sea-coast is rather low, and lies with a gentle slope from the hills which are in the middle of the island. Two-thirds of the N. E. coast was only seen at a great distance; therefore the delineations of it on the chart can have no pretensions to accuracy; but the other parts, I apprehend, are without any material errors.

St. Bartholomew lies between the S. E. end of Tierra del Espiritu Santo, and the north end of Mallicollo; and the distance between it and the latter is eight miles. This is the passage through which M. de Bougainville went; and the middle of it is in latitude 15° 48′.

The Isle of Lepers lies between Espiritu Santo and Aurora Island, eight leagues from the former, and three from the latter, in latitude 15° 22′, and nearly under the same meridian as the S. E. end of Mallicollo. It is of an egg-like figure, very high, and eighteen or twenty leagues in circuit. Its limits were determined by several bearings; but the lines of the shore were traced out by guess, except the N. E. part, where is anchorage half a mile from the land.

Aurora, Whitsuntide, Ambrym, Paoom, and its neighbour Apee, Threehills, and Sandwich Islands, lie all nearly under the meridian of 167° 29′ or 30′ East, extending from the latitude of 14° 51′ 30″, to 17° 53′ 30″.

The island of Aurora lies N. by W. and S. by E., and is eleven leagues long in that direction; but I believe it hardly any where exceeds two or two and a half in breadth. It hath a good heighth, its surface hilly, and every where covered with wood, except where the natives have their dwellings and plantations.

Whitsuntide Isle, which is one league and a half to the south of Aurora, is of the same length, and lies in the direction of north and south, but is something broader than Aurora Island. It is considerably high, and clothed with wood, except such parts as seemed to be cultivated, which were pretty numerous.

From the south end of Whitsuntide Island to the north side of Ambrym is two leagues and an half. This is about seventeen leagues in circuit; its shores are rather low, but the land rises with an unequal ascent to a tolerably high mountain in the middle of the island, from which ascended great columns of smoke; but we were not able to determine whether this was occasioned by a volcano or not. That it is fertile and well inhabited seems probable from the quantities of smoke which we saw rise out of the woods, in such parts of the island as came within the compass of our sight; for it must be observed, that we did not see the whole of it.

We saw still much less of Paoom, and its neighbourhood. I can say no more of this island than that it towers up to a great height, in the form of a round hay-stack; and the extent of it, and of the adjoining isle (if there are two) cannot exceed three or four leagues in any direction; for the distance between Ambrym and Apee is hardly five; and they lie in this space, and east from Port Sandwich, distant about seven or eight leagues.

The island of Apee is not less than twenty leagues in circuit; its longest direction is about eight leagues N. W. and S. E.; it is of considerable height, and hath a hilly surface, diversified with woods and lawns,

the west and south parts especially; for the others we did not see.

Shepherd's Isles are a group of small ones of unequal size, extending off from the S. E. point of Apee about five leagues, in the direction of S. E.

The island Threehills lies south four leagues from the coast of Apee, and S. E. ½ S., distant seventeen leagues, from Port Sandwich: to this, and what has been already said of it, I shall only add, that W. by N., five miles from the west point, is a reef of rocks on which the sea continually breaks.

Nine leagues, in the direction of south, from Threehills, lies Sandwich Island. Twohills, the Monument, and Montagu Islands, lie to the east of this line, and Hinchinbrook to the west, as also two or three small isles which lie between it and Sandwich Island, to which they are connected by breakers.

Sandwich Island is twenty-five leagues in circuit; its greatest extent is ten leagues; and it lies in the direction of N. W. by W. and S. E. by E. The N. W. coast of this island we only viewed at a distance; therefore the chart in this part may be faulty, so far as it regards the line of the coast, but no farther. The distance from the south end of Mallicollo to the N. W. end of Sandwich Island is twenty-two leagues in the direction of S. S. E. ½ E.

In the same direction lie Erromango, Tanna, and Annattom. The first is 18 leagues from Sandwich Island, and is twenty-four or twenty-five leagues in circuit. The middle of it lies in the latitude of 18° 54′, longitude 169° 19′ E., and it is of a good height, as may be gathered from the distance we were off when we first saw it.

Tanna lies six leagues from the south side of Erromango, extending S. E. by S. and N. W. by N. about eight leagues long in that direction, and every where about three or four leagues broad.

The Isle of Immer lies in the direction of N. by E. ½ E., four leagues from Port Resolution in Tanna;

and the island of Erronan or Footoona east, in the same direction, distant eleven leagues. This, which is the most eastern island of all the Hebrides, did not appear to be above five leagues in circuit, but of a considerable height, and flat at top. On the N. E. side is a little peak, seemingly disjoined from the isle, but we thought it was connected by low land.

Annattom, which is the southernmost island, is situated in the latitude of 20° 3′, longitude 170° 4′, and S. 30° East, eleven or twelve leagues from Port Resolution. It is of a good height, with an hilly surface; and more I must not say of it.

Here follows the lunar observations by Mr. Wales, for ascertaining the longitude of these islands, reduced by the watch to Port Sandwich in Mallicollo, and Port Resolution in Tanna.

Port Sandwich,	Mean of 10 sets of observ. before -	167°	56′	33″ ⅝	E. Long.
	- - 2 Ditto, - - - - - - at	168	2	37 ½	
	- - 20 Ditto, - - - - - after	167	52	57	
	Mean of those means, - - - - - -	167	57	22 ¾	
Port Resolution,	Mean of 20 sets of observ. before -	169	37	35	E. Long.
	- - 5 Ditto, - - - - - - at	169	48	48	
	- - 20 Ditto, - - - - - after	169	47	22 ½	
	Mean of those means, - - - - - -	169	44	35	

It is necessary to observe, that each set of observations, consisting of between six and ten observed distances of the sun and moon, or moon and stars, the whole number amounts to several hundreds; and these have been reduced, by means of the watch, to all the islands; so that the longitude of each is as well ascertained as that of the two ports abovementioned. As a proof of this I shall only observe, that the longitude of the two ports, as pointed out by the watch and by the observations, did not differ two miles. This also shows what degree of accuracy these observations are capable of, when multiplied to a considerable number, made with different instru-

ments, and with the sun and stars, or both sides of the moon. By this last method, the errors which may be either in the instruments or lunar tables, destroy one another, and likewise those which may arise from the observer himself; for some men may observe closer than others. If we consider the number of observations that may be obtained in the course of a month (if the weather is favourable) we shall perhaps find this method of finding the longitude of places as accurate as most others; at least it is the most easy, and attended with the least expense to the observer. Every ship that goes to foreign parts is, or may be, supplied with a sufficient number of quadrants at a small expense; I mean good ones, proper for making these observations. For the difference of the price between a good and bad one, I apprehend, can never be an object with an officer. The most expensive article, and what is in some measure necessary in order to arrive at the utmost accuracy, is a good watch; but for common use, and where that strict accuracy is not required, this may be dispensed with. I have observed before, in this journal, that this method of finding the longitude is not so difficult but that any man, with proper application, and a little practice, may soon learn to make these observations as well as the astronomers themselves. I have seldom known any material difference between the observations made by Mr. Wales, and those made by the officers at the same time. *

In observing the variation of the magnetic needle, we found, as usual, our compasses differ among themselves, sometimes near 2°; the same compass, too, would sometimes make nearly this difference in the variation on different days, and even between the morning and evening of the same day, when our change of situation has been but very little. By

* See Vol. III.

the mean of the observations which I made about Erromango, and the S. E. part of these islands, the variation of the compass was 10° 5′ 48″ East; and the mean of those made about Tierra del Espiritu Santo, gave 10° 5′ 30″ East. This is considerably more than Mr. Wales found it to be at Tanna. I cannot say what might occasion this difference in the variation observed at sea and on shore, unless it be influenced by the land; for I must give the preference to that found at sea, as it is agreeable to what we observed before we made the islands, and after we left them.

CHAP. VIII.

AN ACCOUNT OF THE DISCOVERY OF NEW CALEDONIA, AND THE INCIDENTS THAT HAPPENED WHILE THE SHIP LAY IN BALADE.

At sun-rise on the 1st of September, after having stood to S. W. all night, no more land was to be seen. The wind remaining in the S. E. quarter, we continued to stand to S. W. On the 2d, at five o'clock P. M., being in the latitude 18° 22′, longitude 165° 26′, the variation was 10° 50′ East; and at the same hour on the 3d, it was 10° 51′, latitude at that time 19° 14′, longitude 165° East. The next morning, in the latitude of 19° 49′, longitude 164° 53′, the amplitude gave 10° 21′, and the azimuths 10° 7′ East. At eight o'clock, as we were steering to the south, land was discovered bearing S. S. W., and at noon it extended from S. S. E. to W. by S., distant about six leagues. We continued to steer for it with a light breeze at east, till five in the evening, when we were stopped by a calm. At this time we were three leagues from the land, which extended from S. E. by S. to W. by N. round by the S. W. Some openings appeared in the west, so that we could not tell whether it was one connected land or a group of islands. To the S. E. the coast seemed to terminate in a high promontory, which I named Cape Colnett, after one of my midshipmen, who first discovered this land. Breakers were seen about half-way between us and the shore; and, behind them, two or three canoes under sail, standing out to sea, as if their design had been to come off to us; but a little before sun-set they struck their sails, and we saw them no more. After a few hours' calm, we got a breeze at S. E., and spent the night standing off and on.

On the 5th, at sun-rise, the horizon being clear, we

could see the coast extend to the S. E. of Cape Colnett, and round by the S. W. to N. W. by W. Some gaps or openings were yet to be seen to the west; and a reef, or breakers, seemed to lie all along the coast, connected with those we discovered the preceding night. It was a matter of indifference to me whether we plied up the coast to the S. E. or bore down to N. W. I chose the latter; and after running two leagues down the outside of the reef (for such it proved), we came before an opening that had the appearance of a good channel, through which we might go in for the land. I wanted to get at it, not only to visit it, but also to have an opportunity to observe an eclipse of the sun which was soon to happen. With this view we brought to, hoisted out two armed boats, and sent them to sound the channel, ten or twelve large sailing canoes being then near us. We had observed them coming off from the shore, all the morning, from different parts; and some were lying on the reef, fishing as we supposed. As soon as they all got together, they came down to us in a body, and were pretty near when we were hoisting out our boats, which probably gave them some alarm; for, without stopping, they hauled in for the reef, and our boats followed them. We now saw that what we had taken for openings in the coast was low land, and that it was all connected, except the western extremity, which was an island, known by the name of Balabea, as we afterwards learnt.

The boats having made a signal for a channel, and one of them being placed on the point of the reef, on the weather side of it, we stood in with the ship, and took up the other boat in our way, when the officer informed me, that where we were to pass, was sixteen and fourteen fathoms water, a fine sandy bottom, and that, having put along-side two canoes, he found the people very obliging and civil. They gave him some fish; and, in return, he presented them with medals,

&c. In one was a stout robust young man, whom they understood to be a chief. After getting within the reef, we hauled up S. ½ E. for a small low sandy isle that we observed lying under the shore, being followed by all the canoes. Our sounding, in standing in, was from fifteen to twelve fathoms, (a pretty even fine sandy bottom,) for about two miles; then we had six, five, and four fathoms. This was on the tail of a shoal which lies a little without the small isle to the N. E. Being over it, we found seven and eight fathoms water, which shallowed gradually, as we approached the shore, to three fathoms, when we tacked, stood off a little, and then anchored in five fathoms, the bottom a fine sand mixed with mud. The little sandy isle bore E. by S. three quarters of a mile distant; and we were one mile from the shore of the main, which extended from S. E. by E. round by the south to W. N. W. The island of Balabea bore N. W. by N., and the channel, through which we came, north, four miles distant. In this situation we were extremely well sheltered from the reigning winds, by the sandy isle and its shoals, and by the shoal without them.

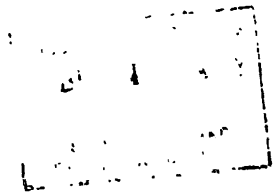
We had hardly got to an anchor before we were surrounded by a great number of the natives, in sixteen or eighteen canoes, the most of whom were without any sort of weapons. At first they were shy of coming near the ship; but in a short time we prevailed on the people in one boat to get close enough to receive some presents. These we lowered down to them by a rope; to which, in return, they tied two fish that stunk intolerably, as did those they gave us in the morning. These mutual exchanges bringing on a kind of confidence, two ventured on board the ship; and presently after she was filled with them, and we had the company of several at dinner in the cabin. Our pea-soup, salt-beef, and pork, they had no curiosity to taste; but they eat of some yams, which we happened to have yet left, calling

them *Oobee*. This name is not unlike *Ooſee*, as they are called at most of the islands, except Mallicollo; nevertheless, we found these people spoke a language new to us. Like all the nations we had lately seen, the men were almost naked, having hardly any other covering but such a wrapper as is used at Mallicollo.* They were curious in examining every part of the ship, which they viewed with uncommon attention. They had not the least knowledge of goats, hogs, dogs, or cats, and had not even a name for one of them. They seemed fond of large spike-nails, and pieces of red cloth, or indeed of any other colour; but red was their favourite.

After dinner I went on shore with two armed boats, having with us one of the natives who had attached himself to me. We landed on a sandy beach before a vast number of people, who had got together with no other intent than to see us; for many of them had not a stick in their hands; consequently we were received with great courtesy, and with the surprise natural for people to express at seeing men and things so new to them as we must be. I made presents to all those my friend pointed out, who were either old men, or such as seemed to be of some note; but he took not the least notice of some women who stood behind the crowd, holding my hand when I was going to give them some beads and medals. Here we found the same chief who had been seen in one of the canoes in the morning. His name, we now learnt, was Teabooma; and we had not been on shore above ten minutes, before he called for silence. Being instantly obeyed by every individual present, he made a short speech; and soon after another chief having called for silence, made a speech also. It was pleasing to see with what attention they were heard. Their speeches were composed of short sentences; to each of which two or three old men

* See the note at p. 32. of this volume.

View in the Island of New Caledonia.



answered, by nodding their heads, and giving a kind of grunt, significant, as I thought, of approbation. It was impossible for us to know the purport of these speeches; but we had reason to think they were favourable to us, on whose account they doubtless were made. I kept my eyes fixed on the people all the time, and saw nothing to induce me to think otherwise. While we were with them, having inquired, by signs, for fresh water, some pointed to the east, and others to the west. My friend undertook to conduct us to it, and embarked with us for that purpose. We rowed about two miles up the coast to the east, where the shore was mostly covered with mangrove trees; and entering amongst them, by a narrow creek or river, which brought us to a little straggling village above all the mangroves, there we landed, and were shown fresh water. The ground near this village was finely cultivated, being laid out in plantations of sugar-canes, plantains, yams, and other roots; and watered by little rills, conducted by art from the main stream, whose source was in the hills. Here were some cocoa-nut trees, which did not seem burdened with fruit. We heard the crowing of cocks, but saw none. Some roots were baking on a fire, in an earthen jar, which would have held six or eight gallons; nor did we doubt its being their own manufacture. As we proceeded up the creek, Mr. Forster having shot a duck flying over our heads, which was the first use these people saw made of our fire-arms, my friend begged to have it; and when he landed, told his countrymen in what manner it was killed. The day being far spent, and the tide not permitting us to stay longer in the creek, we took leave of the people, and got on board a little after sunset. From this little excursion, I found that we were to expect nothing from these people but the privilege of visiting their country undisturbed. For it was easy to see they had little else than good-nature to bestow. In this they exceeded all the nations we

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had yet met with; and, although it did not satisfy the demands of nature, it at once pleased and left our minds at ease.

Next morning we were visited by some hundreds of the natives; some coming in canoes, and others swimming off; so that before ten o'clock, our decks, and all other parts of the ship, were quite full with them. My friend, who was of the number, brought me a few roots, but all the others came empty in respect to eatables. Some few had with them their arms, such as clubs and darts, which they exchanged for nails, pieces of cloth, &c. After breakfast, I sent Lieutenant Pickersgill with two armed boats to look for fresh water; for what we found the day before was by no means convenient for us to get on board. At the same time, Mr. Wales, accompanied by Lieutenant Clerke, went to the little isle to make preparations for observing the eclipse of the sun, which was to be in the afternoon. Mr. Pickersgill soon returning, informed me that he had found a stream of fresh water, pretty convenient to come at. I therefore ordered the launch to be hoisted out to complete our water, and then went to the isle to assist in the observation.

About one P. M. the eclipse came on. Clouds interposed, and we lost the first contact, but were more fortunate in the end, which was observed as follows:

By Mr. Wales with Dollond's 3½ foot achromatic refractor, at - - -	3h	28′	49¼″	Apparent time.
By Mr. Clerke with Bird's 2 foot reflector, at - - - - -	3	28	52¼	
And by me with an 18 inch reflector, made by Watkins - - - -	3	28	53¼	

Latitude of the isle or place of observation, 20° 17′ 39″ south.

Longitude per distance of the sun and moon, and moon and stars, 48 sets, 164° 41′ 21″ east.

Ditto per watch - 163 58 0

Mr. Wales measured the quantity eclipsed by a Hadley's quadrant, a method never before thought of. I am of opinion it answers the purpose of a micrometer to a great degree of certainty, and is a great addition to the use of this most valuable instrument. After all was over, we returned on board, where I found Teabooma the chief, who soon after slipped out of the ship without my knowledge, and by that means lost the present I had made up for him.

In the evening I went ashore to the watering-place, which was at the head of a little creek, at a fine stream that came from the hills. It was necessary to have a small boat in the creek to convey the casks from and to the beach over which they were rolled, and then put into the launch; as only a small boat could enter the creek, and that only at high water. Excellent wood for fuel was here far more convenient than water, but this was an article we did not want. About seven o'clock this evening, died Simon Monk, our butcher, a man much esteemed in the ship; his death being occasioned by a fall down the fore-hatchway the preceding night.

Early in the morning of the 7th, the watering-party, and a guard, under the command of an officer, were sent ashore; and soon after, a party of us went to take a view of the country. As soon as we landed, we made known our design to the natives, and two of them undertaking to be our guides, conducted us up the hills by a tolerably good path. In our route we met several people, most of whom turned back with us; so that at last our train was numerous. Some we met who wanted us to return; but we paid no regard to their signs, nor did they seem uneasy when we proceeded. At length we reached the summit of one of the hills, from which we saw the sea in two places, between some advanced hills on the opposite or S. W. side of the land. This was an useful discovery, as it enabled us to judge of the breadth of

the land, which, in this part, did not exceed ten leagues.

Between those advanced hills and the ridge we were upon, was a large valley, through which ran a serpentine river. On the banks of this were several plantations, and some villages, whose inhabitants we had met on the road, and found more on the top of the hill gazing at the ship, as might be supposed. The plain or flat land, which lies along the shore we were upon, appeared from the hills to a great advantage; the winding streams which ran through it, the plantations, the little straggling villages, the variety in the woods, and the shoals on the coast, so variegating the scene, that the whole might afford a picture for romance. Indeed, if it were not for those fertile spots on the plains, and some few on the sides of the mountains, the whole country might be called a dreary waste. The mountains and other high places are, for the most part, incapable of cultivation, consisting chiefly of rocks, many of which are full of mundicks. The little soil that is upon them is scorched and burnt up with the sun; it is, nevertheless, coated with coarse grass and other plants, and here and there trees and shrubs. The country in general bore great resemblance to some parts of New Holland under the same parallel of latitude, several of its natural productions seeming to be the same, and the woods being without underwood, as in that country. The reefs on the coast, and several other similarities, were obvious to every one who had seen both countries. We observed all the N. E. coast to be covered with shoals and breakers, extending to the northward, beyond the isle of Balabea, till they were lost in the horizon. — Having made these observations, and our guides not choosing to go farther, we descended the mountains by a road different from that by which we ascended. This brought us down through some of their plantations in the plains, which, I observed, were laid out with

great judgment, and cultivated with much labour. Some of them were lying in fallow; some seemingly lately laid down, and others of longer date, pieces of which they were again beginning to dig up. The first thing I observed they did, was to set fire to the grass, &c. which had over-run the surface. Recruiting the land by letting it lie some years untouched, is observed by all the nations in the sea; but they seem to have no notion of manuring it, at least I have no where seen it done. Our excursion was finished by noon, when we returned on board to dinner; and one of our guides having left us, we brought the other with us, whose fidelity was rewarded at a small expence.

In the afternoon I made a little excursion along shore to the westward, in company with Mr. Wales. Besides making observations on such things as we met, we got the names of several places, which I then thought were islands; but upon farther enquiry, I found they were districts upon this same land. This afternoon, a fish being struck by one of the natives near the watering-place, my clerk purchased it, and sent it to me after my return on board. It was of a new species, something like a sun-fish, with a large, long, ugly head. Having no suspicion of its being of a poisonous nature, we ordered it to be dressed for supper; but very luckily, the operation of drawing and describing took up so much time, that it was too late, so that only the liver and row were dressed, of which the two Mr. Forsters and myself did but taste. About three o'clock in the morning, we found ourselves seized with an extraordinary weakness and numbness all over our limbs. I had almost lost the sense of feeling, nor could I distinguish between light and heavy bodies, of such as I had strength to move; a quart pot full of water and a feather being the same in my hand. We each of us took an emetic, and after that a sweat, which gave us much relief. In the morning, one of the pigs which had eaten the

entrails was found dead. When the natives came on board and saw the fish hang up, they immediately gave us to understand it was not wholesome food, and expressed the utmost abhorrence of it; though no one was observed to do this when the fish was to be sold, or even after it was purchased.

On the 8th, the guard and a party of men were on shore as usual. In the afternoon I received a message from the officer, acquainting me that Teabooma, the chief, was come with a present, consisting of a few yams and sugar-canes. In return I sent him, amongst other articles, a dog and a bitch, both young, but nearly full grown. The dog was red and white, but the bitch was all red, or the colour of an English fox. I mention this, because they may prove the Adam and Eve of their species in that country. When the officer returned on board in the evening, he informed me that the chief came attended by about twenty men, so that it looked like a visit of ceremony. It was some time before he would believe the dog and bitch were intended for him; but as soon as he was convinced, he seemed lost in an excess of joy, and sent them away immediately.

Next morning early I dispatched Lieutenant Pickersgill and Mr. Gilbert, with the launch and cutter, to explore the coast to the west; judging this would be better effected in the boats than in the ship, as the reefs would force the latter several leagues from land. After breakfast, a party of men was sent ashore to make brooms; but myself and the two Mr. Forsters were confined on board, though much better, a good sweat having had a happy effect. In the afternoon, a man was seen, both ashore and alongside the ship, said to be as white as any European. From the account I had of him (for I did not see him) his whiteness did not proceed from hereditary descent, but from chance or some disease; and such have been

seen at Otaheite, and the Society Isles.* A fresh easterly wind, and the ship lying a mile from the shore, did not hinder these good-natured people from swimming off to us in shoals of twenty or thirty, and returning the same way.

On the 10th, a party was on shore as usual; and Mr. Forster so well recovered as to go out botanizing.

In the evening of the 11th the boats returned, when I was informed of the following circumstances. From an elevation, which they reached the morning they set out, they had a view of the coast. Mr. Gilbert was of opinion, that they saw the termination of it to the west, but Mr. Pickersgill thought not; though both agreed that there was no passage for the ship that way. From this place, accompanied by two of the natives, they went to Balabea, which they did not reach till after sun-set, and left again next morning before sun-rise; consequently this was a fruitless expedition, and the two following days were spent in getting up to the ship. As they went down to the isle, they saw abundance of turtle but the violence of the wind and sea made it impossible to strike any. The cutter was near being lost, by suddenly filling with water, which obliged them to throw several things overboard, before they could free her and stop the leak she had sprung. From a fishing canoe, which they met coming in from the reefs, they got as much fish as they could eat; and they were received by Teabi, the chief of the isle of Balabea, and the people, who came in numbers to see them, with great courtesy. In order not to be too much crowded, our people drew a line on the ground, and gave the others to understand they were not to come within it. This restriction they observed, and one

* Wafer met with Indians in the isthmus of Darien of the colour of a white horse. See his *Description of the Isthmus*, p. 134. See also Mr. de Paw's Philosophical Inquiries concerning the Americans, where several other instances of this remarkable whiteness are mentioned, and the causes of it attempted to be explained.

of them, soon after, turned it to his own advantage. For happening to have a few cocoa-nuts, which one of our people wanted to buy, and he was unwilling to part with, he walked off, and was followed by the man who wanted them. On seeing this he sat down on the sand, made a circle round him, as he had seen our people do, and signified that the other was not to come within it; which was accordingly observed. As this story was well attested, I thought it not unworthy of a place in this journal.

Early in the morning of the 12th, I ordered the carpenter to work, to repair the cutter, and the water to be replaced which we had expended the three preceding days. As Teabooma, the chief, had not been seen since he got the dogs, and I wanted to lay a foundation for stocking the country with hogs also, I took a young boar and sow with me in the boat, and went up the mangrove creek to look for my friend, in order to give them to him. But when we arrived there, we were told that he lived at some distance, and that they would send for him. Whether they did or no, I cannot say; but he not coming, I resolved to give them to the first man of note I met with. The guide we had to the hills happening to be there, I made him understand, that I intended to leave the two pigs on shore, and ordered them out of the boat for that purpose. I offered them to a grave old man, thinking he was a proper person to intrust them with; but he shook his head, and he, and all present, made signs to take them into the boat again. When they saw I did not comply, they seemed to consult with one another what was to be done; and then our guide told me to carry them to the *Alekee* (chief). Accordingly I ordered them to be taken up, and we were conducted by him to a house wherein were seated, in a circle, eight or ten middle-aged persons. To them I and my pigs being introduced, with great courtesy they desired me to sit down; and then I began to expatiate on the merits of the

two pigs, explaining to them how many young ones the female would have at one time, and how soon these would multiply to some hundreds. My only motive was to enhance their value, that they might take the more care of them; and I had reason to think I, in some measure, succeeded. In the mean time, two men having left the company, soon returned with six yams, which were presented to me; and then I took leave and went on board.

I have already observed, that here was a little village; I now found it much larger than I expected; and, about it, a good deal of cultivated land, regularly laid out, planted and planting with taro or eddy root, yams, sugar-canes, and plantains. The taro plantations were prettily watered by little rills, continually supplied from the main channel at the foot of the mountains, from whence these streams were conducted in artful meanders. They have two methods of planting these roots, some are in square or oblong patches, which lie perfectly horizontal, and sink below the common level of the adjacent land; so that they can let in on them as much water as they think necessary. I have generally seen them covered two or three inches deep; but I do not know that this is always necessary. Others are planted in ridges about three or four feet broad, and two, or two and a half high. On the middle or top of the ridge is a narrow gutter, in and along which is conveyed, as above described, a little rill that waters the roots planted in the ridge, on each side of it; and these plantations are so judiciously laid out, that the same stream waters several ridges. These ridges are sometimes the divisions to the horizontal plantations; and when this method is used, which is for the most part observed where a pathway or something of that sort is requisite, not an inch of ground is lost. Perhaps there may be some difference in the roots, which may make these two methods of raising them necessary. Some are better tasted than others, and they are not

all of a colour. But be this as it may, they are a very wholesome food, and the tops make good greens, and are eaten as such by the natives. On these plantations, men, women, and children were employed.

In the afternoon I went on shore, and, on a large tree, which stood close to the shore, near the watering place, had an inscription cut, setting forth the ship's name, date, &c. as a testimony of our being the first discoverers of this country, as I had done at all others at which we had touched, where this ceremony was necessary. This being done, we took leave of our friends, and returned on board; when I ordered all the boats to be hoisted in, in order to be ready to put to sea in the morning.

CHAP. IX.

A DESCRIPTION OF THE COUNTRY AND ITS INHABITANTS; THEIR MANNERS, CUSTOMS, AND ARTS.

I SHALL conclude our transactions at this place with some account of the country and its inhabitants. They are strong, robust, active, well-made people, courteous and friendly, and not in the least addicted to pilfering, which is more than can be said of any other nation in this sea. They are nearly of the same colour as the natives of Tanna, but have better features, more agreeable countenances, and are a much stouter race; a few being seen who measured six feet four inches. I observed some who had thick lips, flat noses, and full cheeks, and, in some degree, the features and look of a negro. Two things contributed to the forming of such an idea; first, their ruffmop heads; and secondly, their besmearing their faces with black pigment. Their hair and beards are, in general, black. The former is very much frizzled; so that, at first sight, it appears like that of a negro. It is, nevertheless, very different; though both coarser and stronger than ours. Some, who wear it long, tie it up on the crown of the head; others suffer only a large lock to grow on each side, which they tie up in clubs; many others, as well as all the women, wear it cropped short. These rough heads, most probably, want frequent scratching, for which purpose they have a most excellent instrument. This is a kind of comb made of sticks of hard wood, from seven to nine inches long, and about the thickness of knitting needles. A number of these, seldom exceeding twenty, but generally fewer, are fastened together at one end, parallel to, and near 1-10th of an inch from each other. The other ends,

which are a little pointed, will spread out or open like the sticks of a fan, by which means they can beat up the quarters of an hundred lice at a time. These combs or scratchers, for I believe they serve both purposes, they always wear in their hair, on one side their head. The people of Tanna have an instrument of this kind, for the same use; but theirs is forked, I think never exceeding three or four prongs; and sometimes only a small pointed stick. Their beards, which are of the same crisp nature as their hair, are, for the most part, worn short. Swelled and ulcerated legs and feet are common among the men; as also a swelling of the scrotum. I know not whether this is occasioned by disease, or by the mode of applying the wrapper before mentioned, and which they use as at Tanna and Mallicollo. This is their only covering, and is made generally of the bark of a tree, but sometimes of leaves. The small pieces of cloth, paper, &c. which they got from us, were commonly applied to this use. We saw coarse garments amongst them, made of a sort of matting, but they seemed never to wear them, except when out in their canoes and unemployed. Some had a kind of concave, cylindrical, stiff black cap, which appeared to be a great ornament among them, and, we thought, was only worn by men of note, or warriors. A large sheet of strong paper, when they got one from us, was generally applied to this use.

The women's dress is a short petticoat, made of the filaments of the plantain tree, laid over a cord, to which they are fastened, and tied round the waist. The petticoat is made at least six or eight inches thick, but not one inch longer than necessary for the use designed. The outer filaments are dyed black; and, as an additional ornament, the most of them have a few pearl oyster-shells fixed on the right side. The general ornaments of both sexes, are earrings of tortoise-shell, necklaces or amulets, made both of shells and stones, and bracelets, made of

large shells, which they wear above the elbow. They have punctures, or marks on the skin, on several parts of the body; but none, I think, are black, as at the eastern islands. I know not if they have any other design than ornament; and the people of Tanna are marked much in the same manner.

Were I to judge of the origin of this nation, I should take them to be a race between the people of Tanna and of the Friendly Isles; or between those of Tanna and the New Zealanders, or all three; their language, in some respects, being a mixture of them all. In their disposition they are like the natives of the Friendly Isles, but in affability and honesty they excel them.

Notwithstanding their pacific inclination, they must sometimes have wars, as they are well provided with offensive weapons; such as clubs, spears, darts, and slings for throwing stones. The clubs are about two feet and a half long, and variously formed; some like a scythe, others like a pick-axe; some have a head like an hawk, and others have round heads; but all are neatly made. Many of their darts and spears are no less neat, and ornamented with carvings. The slings are as simple as possible; but they take some pains to form the stones that they use into a proper shape; which is something like an egg, supposing both ends to be like the small one. They use a becket, in the same manner as at Tanna, in throwing the dart, which, I believe, is much used in striking fish, &c. In this they seem very dexterous; nor, indeed, do I know that they have any other method of catching large fish; for I neither saw hooks nor lines among them.

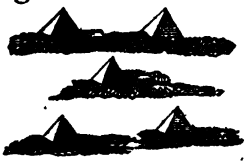
It is needless to mention their working tools, as they are made of the same materials, and nearly in the same manner, as at the other islands. Their axes, indeed, are a little different; some, at least; which may be owing to fancy as much as custom.

Their houses, or at least most of them, are cir-

cular; something like a bee-hive, and full as close and warm. The entrance is by a small door, or long square hole, just big enough to admit a man bent double. The side walls are about four feet and a half high; but the roof is lofty, and peaked to a point at the top, above which is a post or stick of wood, which is generally ornamented either with carving or shells, or both. The framing is of small spars, reeds, &c. and both sides and roof are thick and close covered with thatch, made of coarse long grass. In the inside of the house are set up posts, to which cross spars are fastened and platforms made for the conveniency of laying any thing on. Some houses have two floors, one above the other. The floor is laid with dry grass, and here and there mats are spread for the principal people to sleep or sit on. In most of them we found two fire-places, and commonly a fire burning, and, as there was no vent for the smoke but by the door, the whole house was both smoky and hot, insomuch that we, who are not used to such an atmosphere, could hardly endure it a moment. This may be the reason why we found these people so chilly when in the open air and without exercise. We frequently saw them make little fires any where, and hustle round them, with no other view than to warm themselves. Smoke within doors may be a necessary evil, as it prevents the musquitoes from coming in, which are pretty numerous here. In some respects their habitations are neat; for, besides the ornaments at top, I saw some with carved door-posts. Upon the whole, their houses are better calculated for a cold than a hot climate; and as there are no partitions in them, they can have little privacy.

They have no great variety of household utensils; the earthen jars before mentioned being the only article worth notice. Each family has, at least, one of them, in which they bake their roots, and perhaps their fish, &c. The fire by which they cook their

victuals, is on the outside of each house, in the open air. There are three or five pointed stones fixed in the ground, their pointed ends being about six inches above the surface, in this form: Those of three stones, are only for one jar, those of five stones, for two. The jars do not stand on their bottoms, but lie inclined on their sides. The use of these stones is, obviously, to keep the jars from resting on the fire, in order that it may burn the better.



They subsist chiefly on roots and fish, and the bark of a tree, which I am told grows also in the West Indies. This they roast, and are almost continually chewing. It has a sweetish, insipid taste; and was liked by some of our people. Water is their only liquor; at least, I never saw any other made use of.

Plantains and sugar-canes are by no means in plenty. Bread-fruit is very scarce, and the cocoa-nut trees are small and but thinly planted; and neither one nor the other seems to yield much fruit.

To judge merely by the numbers of the natives we saw every day, one might think the island very populous; but, I believe, that at this time, the inhabitants were collected from all parts on our account. Mr. Pickersgill observed, that down the coast, to the west, there were but few people; and we knew they came daily from the other side of the land, over the mountains, to visit us. But although the inhabitants, upon the whole, may not be numerous, the island is not thinly peopled on the sea-coast, and in the plains and valleys that are capable of cultivation. It seems to be a country unable to support many inhabitants. Nature has been less bountiful to it than to any other tropical island we know in this sea. The greatest part of its surface, or at least what we saw of it, consists of barren, rocky mountains, and the grass, &c. growing on them, is useless to people who have no cattle.

The sterility of the country will apologize for the natives not contributing to the wants of the navigator. The sea may, perhaps, in some measure, compensate for the deficiency of the land; for a coast surrounded by reefs and shoals as this is, cannot fail of being stored with fish.

I have before observed, that the country bears great resemblance to New South Wales, or New Holland, and that some of its natural productions are the same. In particular, we found here the tree which is covered with a soft white ragged bark, easily peeled off, and is, as I have been told, the same that in the East Indies is used for caulking of ships. The wood is very hard, the leaves are long and narrow, of a pale dead green, and a fine aromatic; so that it may properly be said to belong to that continent. Nevertheless, here are several plants, &c. common to the eastern and northern islands, and even a species of the passion-flower, which, I am told, has never before been known to grow wild any where but in America. Our botanists did not complain for want of employment at this place; every day bringing something new in botany or other branches of natural history. Land-birds, indeed, are not numerous, but several are new. One of these is a kind of crow, at least so we called it, though it is not half so big, and its feathers are tinged with blue. They also have some very beautiful turtle-doves, and other small birds, such as I never saw before.

All our endeavours to get the name of the whole island proved ineffectual. Probably, it is too large for them to know by one name. Whenever we made this enquiry, they always gave us the name of some district or place, which we pointed to; and, as before observed, I got the names of several, with the name of the king or chief of each. Hence, I conclude, that the country is divided into several districts, each governed by a chief; but we know nothing of the extent of his power. Balade was the name of

the district we were at, and Tea Booma the chief. He lived on the other side of the ridge of hills, so that we had but little of his company, and therefore could not see much of his power. *Tea* seems a title prefixed to the names of all or most of their chiefs or great men. My friend honoured me by calling me *Tea* Cook.

They deposit their dead in the ground. I saw none of their burying-places; but several of the gentlemen did. In one, they were informed, lay the remains of a chief, who was slain in battle; and his grave, which bore some resemblance to a large mole-hill, was decorated with spears, darts, paddles, &c. all stuck upright in the ground round about it.

The canoes which these people use, are somewhat like those of the Friendly Isles: but the most heavy, clumsy vessels I ever saw. They are what I call double canoes, made out of two large trees hollowed out, having a raised gunnel about two inches high, and closed at each end with a kind of bulk head of the same height; so that the whole is like a long square trough, about three feet shorter than the body of the canoe; that is, a foot and an half at each end. Two canoes, thus fitted, are secured to each other, about three feet asunder, by means of cross spars, which project about a foot over each side. Over these spars is laid a deck or very heavy platform, made of plank and small round spars, on which they have a fire hearth, and generally a fire burning; and they carry a pot or jar to dress their victuals in. The space between the two canoes is laid with plank, and the rest with spars. On one side of the deck, and close to the edge, is fixed a row of knees, pretty near to each other, the use of which is to keep the mast, yards, &c. from rolling over-board. They are navigated by one or two latteen sails, extended to a small latteen yard, the end of which fixes in a notch or hole in the deck. The foot of the sail is extended to a small boom. The sail is composed of pieces of matting,

the ropes are made of the coarse filaments of the plantain tree, twisted into cords of the thickness of a finger; and three or four more such cords, marled together, serve them for shrouds, &c. I thought they sailed very well; but they are not at all calculated for rowing or paddling. Their method of proceeding, when they cannot sail, is by sculling; and for this purpose there are holes in the boarded deck or platform. Through these they put the sculls, which are of such a length, that, when the blade is in the water, the loom or handle is four or five feet above the deck. The man who works it stands behind, and with both his hands sculls the vessel forward. This method of proceeding is very slow, and for this reason, the canoes are but ill calculated for fishing, especially for striking of turtle, which, I think, can hardly ever be done in them. Their fishing implements, such as I have seen, are turtle nets, made, I believe, of the filaments of the plantain tree, twisted; and small hand nets, with very minute meshes made of fine twine and fish gigs. Their general method of fishing, I guess, is to lie on the reefs in shoal water, and to strike the fish that may come in their way. They may, however, have other methods, which we had no opportunity to see, as no boat went out while we were here, all their time and attention being taken up with us. Their canoes are about thirty feet long, and the deck or platform about twenty-four in length and ten in breadth. We had not, at this time, seen any timber in the country so large as that of which their canoes were made. It was observed, that the holes made in the several parts, in order to sew them together, were burnt through, but with what instrument we never learnt; most probably it was of stone; which may be the reason why they were so fond of large spikes, seeing at once they would answer this purpose. I was convinced they were not wholly designed for edge tools; because every one showed a

desire for the iron belaying pins which were fixed in the quarter-deck rail, and seemed to value them far more than a spike-nail, although it might be twice as big. These pins, which are round, perhaps have the very shape of the tool they wanted to make of the nails. I did not find that a hatchet was quite so valuable as a large spike. Small nails were of little or no value; and beads, looking-glasses, &c. they did not admire.

The women of this country, and likewise those of Tanna, are, so far as I could judge, far more chaste than those of the more eastern islands. I never heard that one of our people obtained the least favour from any one of them. I have been told, that the ladies here would frequently divert themselves, by going a little aside with our gentlemen, as if they meant to be kind to them, and then would run away laughing at them. Whether this was chastity or coquetry, I shall not pretend to determine; nor is it material, since the consequences were the same.

CHAP. X.

PROCEEDINGS ON THE COAST OF NEW CALEDONIA, WITH GEOGRAPHICAL AND NAUTICAL OBSERVATIONS.

Every thing being in readiness to put to sea, at sunrise, on the 13th of September, we weighed, and with a fine gale at E. by S., stood out for the same channel we came in by. At half past seven we were in the middle of it. Observatory Isle bore S. 5° E., distant four miles, and the Isle of Balabea W. N. W. As soon as we were clear of the reef, we hauled the wind on the starboard tack, with a view of plying in to the S. E.; but as Mr. Gilbert was of opinion that he had seen the end or N. W. extremity of the land, and that it would be easier to get round by the N. W., I gave over plying, and bore up along the outside of the reef, steering N. N. W., N. W., and N. W. by W. as it trended. At noon the island of Balabea bore S. by W., distant thirteen miles; and what we judged to be the west end of the great land, bore S. W. ½ S., and the direction of the reef was N. W. by W., latitude observed 19° 53′ 20″. Longitude from Observatory Isle 14′ W. We continued to steer N. W. by W. along the outside of the reef till three o'clock, at which time the Isle of Balabea bore S. by E. ½ E. In this direction we observed a partition in the reef, which we judged to be a channel, by the strong tide which set out of it. From this place the reef inclined to the north, for three or four leagues, and then to N. W. We followed its direction, and as we advanced to N. W., raised more land, which seemed to be connected with what we had seen before; so that Mr. Gilbert was mistaken, and did not see the extremity of the coast. At five o'clock this land bore W. by N. ½ N., distant twenty miles; but what we

could see of the reef trended in the direction of N. W. by N.

Having hauled the wind on the starboard tack, and spent the night plying, on the 14th, at sunrise, the Island of Balabea bore S. 6° East, and the land seen the preceding night west, but the reef still trended N. W., along which we steered, with a light breeze at E. S. E. At noon we observed in latitude 19° 28′, longitude from Observatory Isle 27′ West. We had now no sight of Balabea; and the other land, that is, the N. W. part of it, bore W. by S. ½ S.; but we were not sure if this was one continued coast, or separate islands. For though some partitions were seen, from space to space, which made it look like the latter, a multitude of shoals rendered a nearer approach to it exceedingly dangerous, if not impracticable. In the afternoon, with a fine breeze at E. S. E., we ranged the outside of these shoals, which we found to trend in the direction of N. W. by W., N. W. by N., and N. N. E. At three o'clock we passed a low sandy isle, lying on the outer edge of the reef, in latitude 19° 25′, and in the direction of N. E. from the north-westernmost land, six or seven leagues distant. So much as we could see of this space was strewed with shoals, seemingly detached from each other; and the channel leading in amongst them, appeared to be on the S. E. side of the sandy isle; at least there was a space where the sea did not break. At sunset, we could but just see the land, which bore S. W. by S., about ten leagues distant. A clear horizon produced the discovery of no land to the westward of this direction; the reef too, trended away W. by N. ½ N., and seemed to terminate in a point which was seen from the mast head. Thus every thing conspired to make us believe that we should soon get round these shoals; and with these flattering expectations we hauled the wind, which was at E. N. E., and spent the night making short boards.

Next morning, at sunrise, seeing neither land nor

breakers, we bore away N. W. by W., and two hours after saw the reef extending N. W. farther than the eye could reach; but no land was to be seen. It was therefore probable, that we had passed its N. W. extremity; and, as we had seen from the hills of Balade its extent to the S. W., it was necessary to know how far it extended to the E. or S. E. while it was in our power to recover the coast. For, by following the direction of the shoals, we might have been carried so far to leeward as not to be able to beat back without considerable loss of time. We were already far out of sight of land; and there was no knowing how much farther we might be carried, before we found an end to them. These considerations, together with the risk we must run in exploring a sea strewed with shoals, and where no anchorage, without them, is to be found, induced me to abandon the design of proceeding round by the N. W., and to ply up to the S. E., in which direction I knew there was a clear sea. With this view, we tacked and stood to the S. E., with the wind at N. E. by E., a gentle breeze. At this time we were in the latitude of 19° 7′ S., longitude 168° 57′ East.

In standing to S. E. we did but just weather the point of the reef we had passed the preceding evening. To make our situation the more dangerous, the wind began to fail us; and at three in the afternoon it fell calm, and left us to the mercy of a great swell, setting directly on the reef, which was hardly a league from us. We sounded, but found no bottom, with a line of 200 fathoms. I ordered the pinnace and cutter to be hoisted out to tow the ship; but they were of little use against so great a swell. We, however, found that the ship did not draw near the reef so fast as might be expected; and at seven o'clock, a light air at N. N. E. kept her head to the sea; but it lasted no longer than midnight, when it was succeeded by a dead calm.

At day-break, on the 16th, we had no sight of the

reef; and at eleven, a breeze springing up at S.S.W. we hoisted in the boats, and made sail to S.E. At noon we observed in 19° 35′ South, which was considerably more to the south than we expected, and showed that a current or tide had been in our favour all night, and accounted for our getting so unexpectedly clear of the shoals. At two o'clock P.M. we had again a calm, which lasted till nine, when it was succeeded by a light air from E.N.E. and E., with which we advanced but slowly.

On the 17th, at noon, we observed in latitude 19° 54′, when the Isle of Balabea bore S. 60° West, ten and a half leagues distant. We continued to ply, with variable light winds, between N.E. and S.E. without meeting with any thing remarkable till the 20th at noon, when Cape Colnet bore N. 78° West, distant six leagues. From this cape the land extended round by the south to E.S.E. till it was lost in the horizon; and the country appeared with many hills and vallies. Latitude observed 20° 41′, longitude made from Observatory Isle 1° 8′ East. We stood in shore with a light breeze at east till sunset, when we were between two and three leagues off. The coast extended from S. 42° ½ East to N. 59° West. Two small islets lay without this last direction, distant from us four or five miles; some others lay between us and the shore, and to the east, where they seemed to be connected by reefs, in which appeared some openings from space to space. The country was mountainous, and had much the same aspect as about Balade. On one of the western small isles was an elevation like a tower; and, over a low neck of land within the isle, were seen many other elevations resembling the masts of a fleet of ships.

Next day, at sunrise, after having stood off all night with a light breeze at S.E., we found ourselves about six leagues from the coast; and in this situation we were kept by a calm till ten in the evening,

when we got a faint land breeze at S. W., with which we steered S. E. all night.

On the 22d, at sunrise, the land was clouded, but it was not long before the clouds went off, and we found, by our land-marks, that we had made a good advance. At ten o'clock, the land-breeze being succeeded by a sea-breeze at E. by S., this enabled us to stand in for the land, which at noon extended from N. 78° West, to S. 31½° East, round by the south. In this last direction the coast seemed to trend more to the south in a lofty promontory, which, on account of the day, received the name of Cape Coronation. Latitude 22° 2′, longitude 167° 7½′ East. Some breakers lay between us and the shore, and probably they were connected with those we had seen before.

During the night we had advanced about two leagues to S. E., and at day-break, on the 23d, an elevated point appeared in sight beyond Cape Coronation, bearing S. 23° East. It proved to be the S.E. extremity of the coast, and obtained the name of Queen Charlotte's Foreland. Latitude 22° 16′ S., longitude 167° 14′ East. About noon, having got a breeze from the N. E., we stood to S. S. E., and, as we drew towards Cape Coronation, saw in a valley to the south of it, a vast number of those elevated objects before-mentioned; and some low land under the Foreland was wholly covered with them. We could not agree in our opinions of what they were. I supposed them to be a singular sort of trees, being too numerous to resemble any thing else; and a great deal of smoke kept rising all the day from amongst those near the Cape. Our philosophers were of opinion that this was the smoke of some internal and perpetual fire. My representing to them that there was no smoke here in the morning, would have been of no avail, had not this eternal fire gone out before night, and no more smoke been seen after. They were still more positive, that the elevations were pillars of basaltes, like those which compose the

Giant's Causeway in Ireland. At sunset, the wind veering round to the south, we tacked and stood off, it not being safe to approach the shore in the dark. At day-break we stood in again, with a faint land-breeze between E. S. E. and S. S. E. At noon observed in latitude 21° 59′ 30″, Cape Coronation bearing west southerly, distant seven leagues, and the Foreland S. 38° West. As we advanced to S. S. W. the coast beyond the Foreland began to appear in sight; and, at sunset, we discovered a low island lying S. S. E., about seven miles from the Foreland. It was one of those which are generally surrounded with shoals and breakers. At the same time a round hill was seen bearing S. 24° East, twelve leagues distant. During night, having had variable light winds, we advanced but little either way.

On the 25th, about ten o'clock A. M., having got a fair breeze at E. S. E., we stood to S. S. W., in hopes of getting round the Foreland; but, as we drew near, we perceived more low isles beyond the one already mentioned, which at last appeared to be connected by breakers, extending towards the Foreland, and seeming to join the shore. We stood on till half-past three o'clock, when we saw, from the deck, rocks just peeping above the surface of the sea, on the shoal above mentioned. It was now time to alter the course, as the day was too far spent to look for a passage near the shore, and we could find no bottom to anchor in during the night. We therefore stood to the south, to look for a passage without the small isles. We had a fine breeze at E. S. E., but it lasted no longer than five o'clock, when it fell to a dead calm. Having sounded, a line of 170 fathoms did not reach the bottom, though we were but a little way from the shoals, which, instead of following the coast to S. W., took a S. E. direction towards the hill we had seen the preceding evening, and seemed to point out to us that it was necessary to go round that land. At this time the most advanced point on the

main bore S. 68° West, distant nine or ten leagues. About seven o'clock we got a light breeze at north, which enabled us to steer out E. S. E., and to spend the night with less anxiety. On some of the low isles were many of those elevations already mentioned. Every one was now satisfied they were trees, except our philosophers; who still maintained that they were basaltes.

About day break, on the 26th, the wind having shifted to S.S. W., we stretched to S. E. for the hill before mentioned. It belonged to an island, which at noon extended from S. 16° E. to S. 7° West, distant six leagues. Latitude observed 22° 16′ South. In the P. M. the wind freshened, and, veering to S.S. E., we stretched to the east, till two A.M. on the 27th, when we tacked and stood to S. W. with hopes of weathering the island; but we fell about two miles short of our expectations, and had to tack about a mile from the east side of the island, the extremes bearing from N.W. by N. to S.W. the hill west, and some low isles, lying off the S. E. point, S. by W. These seemed to be connected with the large island by breakers. We sounded when in stays, but had no ground with a line of eighty fathoms. The skirts of this island were covered with the elevations more than once mentioned. They had much the appearance of tall pines, which occasioned my giving that name to the island. The round hill, which is on the S. W. side, is of such a height as to be seen fourteen or sixteen leagues. The island is about a mile in circuit, and situated in latitude 22° 38′ S., longitude 167° 40′ East. Having made two attempts to weather the Isle of Pines before sunset, with no better success than before, this determined me to stretch off till midnight. This day at noon the thermometer was at 68°¾, which is lower than it had been since the 27th of February.

Having tacked at midnight, assisted by the currents, and a fresh gale at E.S.E. and S.E., next

morning, at daybreak, we found ourselves several leagues to windward of the Isle of Pines, and bore away large, round the S.E., and south sides. The coast from the S.E., round by the south to the west, was strewed with sand-banks, breakers, and small low isles, most of which were covered with the same lofty trees that ornamented the borders of the greater one. We continued to range the outside of these small isles and breakers, at three-fourths of a league distance, and as we passed, one raised another; so that they seemed to form a chain extending to the isles which lie off the Foreland. At noon we observed, in latitude 22° 44′ 36″ South, the Isle of Pines, extending from N. by E. ½ E. to E. by N., and Cape Coronation N. 32° 30′ West, distant seventeen leagues. In the afternoon, with a fine gale at E., we steered N.W. by W. along the outside of the shoals, with a view of falling in with the land a little to S.W. of the Foreland. At two o'clock P. M. two low islets were seen bearing W. by S., and as they were connected by breakers, which seemed to join those on our starboard, this discovery made it necessary to haul off S.W. in order to get clear of them all. At three, more breakers appeared, extending from the low isles towards the S.E. We now hauled out close to the wind; and, in an hour and an half, were almost on board the breakers, and obliged to tack. From the mast-head, they were seen to extend as far as E.S.E., and the smoothness of the sea made it probable that they extended to the north of east, and that we were in a manner surrounded by them. At this time the hill on the Isle of Pines bore N. 71½° East, the Foreland N. ¼ W., and the most advanced point of land on the S.W. coast bore N.W., distant fifteen or sixteen leagues. This direction of the S.W. coast, which was rather within the parallel of the N.E., assured us that this land extended no farther to the S.W. After making a short trip to N.N.E., we stood again to the south, in expectation of having a better

view of the shoals before sunset. We gained nothing by this but the prospect of a sea strewed with shoals, which we could not clear but by returning in the track by which we came. We tacked nearly in the same place where we had tacked before, and on sounding found a bottom of fine sand. But anchoring in a strong gale, with a chain of breakers to leeward, being the last resource, I rather chose to spend the night in making short boards over that space we had, in some measure, made ourselves acquainted with in the day. And thus it was spent; but under the terrible apprehension, every moment, of falling on some of the many dangers which surrounded us.

Daylight showed that our fears were not ill-founded, and that we had been in the most imminent danger; having had breakers continually under our lee, and at a very little distance from us. We owed our safety to the interposition of Providence, a good look-out, and the very brisk manner in which the ship was managed; for, as we were standing to the north, the people on the lee gangway and forecastle saw breakers under the lee-bow, which we escaped by quickly tacking the ship.

I was now almost tired of a coast which I could no longer explore, but at the risk of losing the ship and ruining the whole voyage. I was, however, determined not to leave it, till I knew what trees those were which had been the subject of our speculation; especially as they appeared to be of a sort useful to shipping, and had not been seen any where but in the southern part of this land. With this view, after making a trip to the south, to weather the shoals under our lee, we stood to the north, in hopes of finding anchorage under some of the islets on which these trees grew. We were stopped by eight o'clock by the shoals which lie extended between the Isle of Pines and Queen Charlotte's Foreland; and found soundings off them in fifty-five, forty, and thirty-six

fathoms, a fine sandy bottom. The nearer we came to these shoals, the more we saw of them, and we were not able to say if there was any passage between the two lands.

Being now but a few miles to windward of the low isles lying off the Foreland, mentioned on the 25th and 26th, I bore down to the one next to us. As we drew near it I perceived that it was unconnected with the neighbouring shoals, and that it is probable we might get to an anchor under its lee or west side. We therefore stood on, being conducted by an officer at the mast-head; and after hauling round the point of the reef which surrounds the isle, we attempted to ply to windward, in order to get nearer the shore. Another reef to the north confined us to a narrow channel, through which ran a current against us, that rendered this attempt fruitless; so that we were obliged to anchor in thirty-nine fathoms' water, the bottom fine coral sand; the isle bearing W. by N., one mile distant. As soon as this was done, we hoisted out a boat, in which I went ashore, accompanied by the botanists. We found the tall trees to be a kind of spruce pine, very proper for spars, of which we were in want. After making this discovery, I hastened on board in order to have more time after dinner, when I landed again with two boats, accompanied by several of the officers and gentlemen, having with us the carpenter and some of his crew, to cut down such trees as were wanting. While this was doing, I took the bearings of several lands round. The hill on the Isle of Pines bore S. 59° 30′ E.; the low point of Queen Charlotte's Foreland N. 14° 30′ West; the high land over it, seen over two low isles, N. 20° West; and the most advanced point of land to the west, bore west, half a point south, distant six or seven leagues. We had, from several bearings, ascertained the true direction of the coast from the Foreland to this point, which I shall distinguish by the name of Prince of Wales's Foreland. It is

situated in the latitude of 22° 29′ S., longitude 166° 57′ E., is of a considerable height, and, when it first appears above the horizon, looks like an island From this cape the coast trended nearly N.W. This was rather too northerly a direction to join that part which we saw from the hills of Balade. But as it was very high land which opened off the cape in that direction, it is very probable that lower land, which we could not see, opened sooner; or else the coast more to the N.W. takes a more westerly direction, in the same manner as the N.E. coast. Be this as it may, we pretty well know the extent of the land, by having it confined within certain limits. However, I still entertained hopes of seeing more of it; but was disappointed.

The little isle upon which we landed, is a mere sand bank, not exceeding three-fourths of a mile in circuit, and on it, besides these pines, grew the *Etos* tree of Otaheite, and a variety of other trees, shrubs, and plants. These gave sufficient employment to our botanists, all the time we said upon it, and occasioned my calling it Botany Isle. On it were several water-snakes, some pigeons and doves, seemingly different from any we had seen. One of the officers shot a hawk, which proved to be of the very same sort as our English fishing-hawks. Several fire-places, branches, and leaves very little decayed, remains of turtle, &c. showed that people had lately been on the isle. The hull of a canoe, precisely of the same shape as those we had seen at Balade, lay wrecked in the sand. We were now no longer at a loss to know of what trees they make their canoes, as they can be no other than these pines. On this little isle were some which measured twenty inches diameter, and between sixty and seventy feet in length, and would have done very well for a foremast to the Resolution, had one been wanting. Since trees of this size are to be found on so small a spot, it is reasonable to expect to find some much

larger on the main, and larger isles, and, if appearances did not deceive us, we can assert it.

If I except New Zealand, I, at this time, knew of no island in the South Pacific Ocean, where a ship could supply herself with a mast or a yard, were she ever so much distressed for want of one. Thus far the discovery is or may be valuable. My carpenter, who was a mast-maker as well as a ship-wright, two trades he learnt in Deptford yard, was of opinion that these trees would make exceedingly good masts. The wood is white, close-grained, tough, and light. Turpentine had exuded out of most of the trees, and the sun had inspissated it into a rosin, which was found sticking to the trunks, and lying about the roots. These trees shoot out their branches like all other pines; with this difference, that the branches of these are much smaller and shorter; so that the knots become nothing when the tree is wrought for use. I took notice, that the largest of them had the smallest and shortest branches, and were crowned, as it were, at the top, by a spreading branch like a bush. This was what led some on board into the extravagant notion of their being basaltes: indeed, no one could think of finding such trees here. — The seeds are produced in cones; but we could find none that had any in them, or that were in a proper state for vegetable or botanical examination. Besides these, there was another tree or shrub of the spruce fir kind; but it was very small. We also found on the isle a sort of scurvy-grass, and a plant, called by us Lamb's Quarters, which, when boiled, eat like spinnage.

Having got ten or twelve small spars to make studding sail booms, boats'-masts, &c., and night approaching, we returned with them on board.

The purpose for which I anchored under this isle being answered, I was now to consider what was next to be done. We had, from the topmast head, taken a view of the sea around us, and observed the whole, to the west, to be strewed with small islets,

sand-banks, and breakers, to the utmost extent of our horizon. They seemed, indeed, not to be all connected, and to be divided by winding channels. But when I considered, that the extent of this S.W. coast was already pretty well determined; the great risk attending a more accurate survey, and the time it would require to accomplish it, on account of the many dangers we should have to encounter, I determined not to hazard the ship down to leeward, where we might be so hemmed in as to find it difficult to return, and by that means lose the proper season for getting to the south. I now wished to have had the little vessel set up, the frame of which we had on board. I had some thoughts of doing this when we were last at Otaheite, but found it could not be executed, without neglecting the caulking and other necessary repairs of the ship, or staying longer there than the route I had in view would admit. It was now too late to begin setting her up, and then to use her in exploring this coast; and in our voyage to the south, she could be of no service. These reasons induced me to try to get without the shoals; that is, to the southward of them.

Next morning, at day-break, we got under sail, with a light breeze at E. by N. We had to make some trips to weather the shoals to leeward of Botany Isle; but when this was done, the breeze began to fail; and at three P.M. it fell calm. The swell, assisted by the current, set us fast to S.W. towards the breakers, which were yet in sight in that direction. Thus we continued till ten o'clock, at which time a breeze springing up at N.N.W. we steered E.S.E., the contrary course we had come in; not daring to steer farther south till day-light.

At three o'clock next morning, the wind veered to S.W., blew hard, and in squalls, attended with rain, which made it necessary to proceed with our courses up, and topsails on the cap, till day-break, when the hill on the Isle of Pines bore N., and our distance

from the shore in that direction was about four leagues. We had now a very strong wind at S.S.W., attended by a great sea, so that we had reason to rejoice at having got clear of the shoals before this gale overtook us. Though every thing conspired to make me think this was the westerly monsoon, it can hardly be comprehended under that name, for several reasons; first, because it was near a month too soon for these winds; secondly, because we know not if they reach this place at all; and lastly, because it is very common for westerly winds to blow within the tropics. However, I never found them to blow so hard before, or so far southerly. Be these things as they may, we had now no other choice but to stretch to S. E., which we accordingly did, with our starboard tacks aboard; and at noon were out of sight of land.

The gale continued with very little alteration till noon next day; at which time we observed in latitude 23° 18′, longitude made from the Isle of Pines 1° 54′ East. In the afternoon we had little wind from the south, and a great swell from the same direction; and many boobies, tropic, and men-of-war birds were seen. At eleven o'clock a fresh breeze sprung up at W. by S., with which we stood to the south. At this time we were in the latitude of 23° 18′, longitude 169° 49′ E., and about forty-two leagues south of the Hebrides.

At eight o'clock in the morning, on the 3d, the wind veered to S. W., and blew a strong gale by squalls, attended with rain. I now gave over all thought of returning to the land we had left. Indeed, when I considered the vast ocean we had to explore to the south; the state and condition of the ship, already in want of some necessary stores; that summer was approaching fast; and that any considerable accident might detain us in this sea another year; I did not think it advisable to attempt to regain the land.

Thus I was obliged, as it were by necessity, for

the first time, to leave a coast I had discovered, before it was fully explored. I called it New Caledonia; and, if we except New Zealand, it is perhaps the largest island in the South Pacific Ocean; for it extends from the latitude of 19° 37′ to 22° 30′ S., and from the longitude of 163° 37′ to 167° 14′ E. It lies nearly N. W. ½ W., and S. E. ½ E., and is about eighty-seven leagues long in that direction; but its breadth is not considerable, not any where exceeding ten leagues. It is a country full of hills and valleys, of various extent both for height and depth. To judge of the whole by the parts we were on, from these hills spring vast numbers of little rivulets, which greatly contribute to fertilize the plains, and to supply all the wants of the inhabitants. The summits of most of the hills seem to be barren; though some few are clothed with wood; as are all the plains and valleys. By reason of these hills, many parts of the coast, when at a distance from it, appeared indented, or to have great inlets between the hills; but, when we came near the shore, we always found such places shut up with low land, and also observed low land to lie along the coast between the sea-shore and the foot of the hills. As this was the case in all such parts as we came near enough to see, it is reasonable to suppose that the whole coast is so. I am likewise of opinion, that the whole, or greatest part, is surrounded by reefs or shoals, which render the access to it very dangerous, but at the same time guard the coast from the violence of the wind and sea; make it abound with fish; secure an easy and safe navigation along it, for canoes, &c. and most likely form some good harbours for shipping. Most, if not every part of the coast is inhabited, the Isle of Pines not excepted; for we saw either smoke by day, or fires by night, wherever we came. In the extent which I have given to this island is included the broken or unconnected lands to the N. W., as they are delineated in the chart. That they may be connected, I

shall not pretend to deny; we were however of opinion that they were isles, and that New Caledonia terminated more to S. E., though this, at most, is but a well-founded conjecture.

But whether these lands be separate isles, or connected with New Caledonia, it is by no means certain that we saw their termination to the west. I think we did not, as the shoals did not end with the land we saw, but kept their N. W. direction farther than Bougainville's track in the latitude of 15° or 15½° Nay, it seems not improbable, that a chain of isles, sand-banks, and reefs, may extend to the west, as far as the coast of New South Wales. The eastern extent of the isles and shoals off that coast, between the latitude of 15° and 23°, were not known. The semblance of the two countries; * Bougainville's meeting with the shoal of Diana above sixty leagues from the coast, and the signs he had of land to the S. E., all tend to increase the probability. I must confess that it is carrying probability and conjecture a little too far, to say what may lie in a space of two hundred leagues; but it is in some measure necessary, were it only to put some future navigator on his guard.

Mr. Wales determined the longitude of that part of New Caledonia we explored, by ninety-six sets of observations, which were reduced to one another by our trusty guide the watch. I found the variation of the compass to be 10° 24′ E. This is the mean variation given by the three azimuth compasses we had on board, which would differ from each other a degree and a half, and sometimes more. I did not observe any difference in the variation between the N. W. and S. E. parts of this land, except when we were at anchor before Balade, where it was less than 10°; but this I did not regard, as I found such an uniformity out at sea; and it is there where navigators

* See his Voyage, English translation, p. 303.

want to know the variation. While we were on the N. E. coast, I thought the currents set to S. E. and W. or N. W. on the other side; but they are by no means considerable, and may as probably be channels of tides as regular currents. In the narrow channels which divide the shoals, and those which communicate with the sea, the tides run strong; but their rise and fall are inconsiderable, not exceeding three feet and a half. The time of high water, at the full and change, at Balade, is about six o'clock; but at Botany Isle we judged it would happen about ten or eleven o'clock.

CHAP. XI.

SEQUEL OF THE PASSAGE FROM NEW CALEDONIA TO NEW ZEALAND, WITH AN ACCOUNT OF THE DISCOVERY OF NORFOLK ISLAND; AND THE INCIDENTS THAT HAPPENED WHILE THE SHIP LAY IN QUEEN CHARLOTTE'S SOUND.

THE wind continuing at S. W., W. S. W. and W. blowing a fresh gale, and now and then squalls, with showers of rain, we steered to S. S. E., without meeting with any remarkable occurrence till near noon on the 6th, when it fell calm. At this time we were in the latitude of 27° 50′ S., longitude 171° 43′ E. The calm continued till noon the next day, during which time we observed the variation to be 10° 33½′ E. I now ordered the carpenters to work to caulk the decks. As we had neither pitch, tar, nor rosin, left to pay the seams, this was done with varnish of pine, and afterwards covered with coral sand, which made a cement far exceeding my expectation. In the afternoon, we had a boat in the water, and shot two albatrosses, which were geese to us. We had seen one of this kind of birds the day before, which was the first we observed since we had been within the tropic. On the 7th, at one P. M., a breeze sprung up at south; soon after it veered to, and fixed at S. E. by S., and blew a gentle gale, attended with pleasant weather.

We stretched to W. S. W., and next day at noon were in the latitude of 28° 25′, longitude 170° 26′ E. In the evening, Mr. Cooper having struck a porpoise with a harpoon, it was necessary to bring to, and have two boats out, before we could kill it, and get it on board. It was six feet long; a female of that kind, which naturalists call dolphin of the antients, and which differs from the other kind of porpoise in the head and jaw, having them long and pointed.

This had eighty-eight teeth in each jaw. The haslet and lean flesh were to us a feast. The latter was a little liverish, but had not the least fishy taste. It was eaten roasted, broiled, and fried, first soaking it in warm water. Indeed little art was wanting to make any thing fresh, palatable to those who had been living so long on salt meat.

We continued to stretch to W. S. W. till the 10th, when, at day-break, we discovered land bearing S. W., which on a nearer approach we found to be an island of good height, and five leagues in circuit. I named it Norfolk Isle, in honour of the noble family of Howard. It is situated in the latitude of 29° 2′ 30″ S., and longitude 168° 16′ E. The latter was determined by lunar observations made on this, the preceding, and following days; and the former, by a good observation at noon, when we were about three miles from the isle. Soon after we discovered the isle we sounded in twenty-two fathoms on a bank of coral sand; after this we continued to sound, and found not less than twenty-two, or more than twenty-four fathoms (except near the shore), and the same bottom mixed with broken shells. After dinner, a party of us embarked in two boats, and landed on the island, without any difficulty, behind some large rocks which lined part of the coast on the N. E. side.

We found it uninhabited, and were undoubtedly the first that ever set foot on it. We observed many trees and plants common at New Zealand; and, in particular, the flax plant, which is rather more luxuriant here than in any part of that country; but the chief produce is a sort of spruce pine, which grows in great abundance, and to a large size, many of the trees being as thick, breast high, as two men could fathom, and exceedingly straight and tall. This pine is of a sort between that which grows in New Zealand and that in New Caledonia; the foliage differing something from both; and the wood not so heavy as

the former, nor so light and close-grained as the latter. It is a good deal like the Quebec pine. For about two hundred yards from the shore the ground is covered so thick with shrubs and plants, as hardly to be penetrated farther inland. The woods were perfectly clear and free from underwood, and the soil seemed rich and deep.

We found the same kind of pigeons, parrots, and paroquets as in New Zealand, rails, and some small birds. The sea fowl are, white boobies, gulls, tern, &c. which breed undisturbed on the shores, and in the cliffs of the rocks.

On the isle is fresh water; and cabbage-palm, wood-sorrel, sow thistle, and samphire abounding in some places on the shores; we brought on board as much of each sort as the time we had to gather them would admit. These cabbage-trees, or palms, were not thicker than a man's leg, and from ten to twenty feet high. They are of the same genus with the cocoa-nut tree; like it, they have large pinnated leaves, and are the same as the second sort found in the northern parts of New South Wales.* The cabbage is, properly speaking, the bud of the tree; each tree producing but one cabbage, which is at the crown, where the leaves spring out, and is inclosed in the stem. The cutting off the cabbage effectually destroys the tree; so that no more than one can be had from the same stem. The cocoa-nut tree, and some others of the palm kind, produce cabbage as well as these. This vegetable is not only wholesome, but exceedingly palatable, and proved the most agreeable repast we had for some time.

The coast does not want fish. While we were on shore, the people in the boats caught some which were excellent. I judged that it was high water at the full and change, about one o'clock, and that the

* Vide Hawkesworth's Voyages, vol. iii.

tide rises and falls upon a perpendicular about four or five feet.

The approach of night brought us all on board, when we hoisted in the boats; and stretching to E. N. E. (with the wind at S. E.) till midnight, we tacked, and spent the remainder of the night making short boards.

Next morning, at sun-rise, we made sail, stretching to S. S. W., and weathered the island, on the south side of which lie two isles, that serve as roosting and breeding-places for birds. On this, as also on the S. E. side, is a sandy beach; whereas most of the other shores are bounded by rocky cliffs which have twenty and eighteen fathoms water close to them; at least so we found it on the N. E. side, and with good anchorage. A bank of coral sand, mixed with shells, on which we found from nineteen to thirty-five or forty fathoms water, surrounds the isle, and extends, especially to the south, seven leagues off. The morning we discovered the island the variation was found to be 13° 9′ E.; but I think this observation gave too much, as others, which we had both before and after, gave 2° less.

After leaving Norfolk Isle, I steered for New Zealand, my intention being to touch at Queen Charlotte's Sound, to refresh my crew, and put the ship in a condition to encounter the southern latitudes.

On the 17th, at day-break, we saw Mount Egmont, which was covered with everlasting snow, bearing S. E. ¼ E. Our distance from the shore was about eight leagues, and, on sounding, we found seventy fathoms water, a muddy bottom. The wind soon fixed in the western board, and blew a fresh gale, with which we steered S. S E. for Queen Charlotte's Sound, with a view of falling in with Cape Stephens. At noon Cape Egmont bore E. N. E., distant three or four leagues; and though the mount was hid in the clouds, we judged it to be in the same direction as the Cape; latitude observed 39° 24′.

The wind increased in such a manner as to oblige us to close reef our top-sails, and strike top-gallant yards. At last we could bear no more sail than the two courses, and two close-reefed top-sails; and under them we stretched for Cape Stephens, which we made at eleven o'clock at night.

At midnight we tacked, and made a trip to the north till three o'clock next morning, when we bore away for the sound. At nine we hauled round Point Jackson, through a sea which looked terrible, occasioned by a rapid tide and a high wind; but as we knew the coast, it did not alarm us. At eleven o'clock we anchored before Ship Cove; the strong flurries from off the land not permitting us to get in.

In the afternoon, as we could not move the ship, I went into the cove, with the seine, to try to catch some fish. The first thing I did after landing was to look for the bottle I left hid when last here, in which was the memorandum. It was taken away; but by whom it did not appear. Two hauls with the seine producing only four small fish, we, in some measure, made up for this deficiency, by shooting several birds, which the flowers in the garden had drawn thither, as also some old shags, and by robbing the nests of some young ones.

Being little wind next morning, we weighed, and warped the ship into the Cove, and there moored with the two bowers. We unbent the sails to repair them, several having been split, and otherwise damaged in the late gale. The main and four courses, already worn to the very utmost, were condemned as useless. I ordered the top-masts to be struck and unrigged, in order to fix to them moveable chocks or knees, for want of which the trestle-trees were continually breaking; the forge to be set up, to make bolts and repair our iron-work; and tents to be erected on shore for the reception of a guard, coopers, sail-makers, &c. I likewise gave orders that vegetables (of which there were plenty) should be boiled

every morning with oat-meal and portable broth for breakfast, and with peas and broth every day for dinner for the whole crew, over and above their usual allowance of salt malt.

In the afternoon, as Mr. Wales was setting up his observatory, he discovered that several trees, which were standing when we last sailed from this place, had been cut down with saws and axes; and a few days after, the place where an observatory, clock, &c. had been set up, was also found, in a spot different from that where Mr. Wales had placed his. It was therefore now no longer to be doubted that the Adventure had been in this cove after we had left it.

Next day, winds southerly, hazy cloudy weather. Every body went to work at their respective employments, one of which was to caulk the ship's sides, a thing much wanted. The seams were paid with putty, made with cook's fat and chalk; the gunner happening to have a quantity of the latter on board.

The 21st, wind southerly, with continual rains.

The weather being fair in the afternoon of the 22d, accompanied by the botanists, I visited our gardens on Motuara, which we found almost in a state of nature, having been wholly neglected by the inhabitants. Nevertheless, many articles were in a flourishing condition, and showed how well they liked the soil in which they were planted. None of the natives having yet made their appearance, we made a fire on the point of the island; in hopes, if they saw the smoke, they might be induced to come to us.

Nothing remarkable happened till the 24th, when, in the morning, two canoes were seen coming down the sound; but as soon as they perceived the ship, they retired behind a point on the west side. After breakfast I went in a boat to look for them; and as we proceeded along the shore, we shot several birds. The report of the muskets gave notice of our approach, and the natives discovered themselves in Shag Cove by hallooing to us; but as we drew near

to their habitations, they all fled to the woods, except two or three men, who stood on a rising ground near the shore, with their arms in their hands. The moment we landed, they knew us. Joy then took place of fear, and the rest of the natives hurried out of the woods, and embraced us over and over again, leaping and skipping about like madmen; but I observed that they would not suffer some women, whom we saw at a distance, to come near us. After we had made them presents of hatchets, knives, and what else we had with us, they gave us in return a large quantity of fish, which they had just caught. There were only a few amongst them whose faces we could recognise; and on our asking why they were afraid of us, and inquiring for some of our old acquaintances by name, they talked much about killing, which was so variously understood by us, that we could gather nothing from it; so that, after a short stay, we took leave, and went on board.

Next morning early, our friends, according to a promise they made us the preceding evening, paying us a visit, brought with them a quantity of fine fish, which they exchanged for Otaheitean cloth, &c. and then returned to their habitations.

On the 26th we got into the after-hold four boat-load of shingle ballast, and struck down six guns, keeping only six on deck. Our good friends the natives having brought us a plentiful supply of fish, afterwards went on shore to the tents, and informed our people there, that a ship like ours had been lately lost in the Strait; that some of the people got on shore; and that the natives stole their clothes, &c. for which several were shot; that afterwards, when they could fire no longer, the natives having got the better, killed them with their *Patapatoos*, and eat them; but that they themselves had no hand in the affair, which, they said, happened at Vanna Aroa, near Teerawhitte, on the other side of the Strait. One man said it was two moons ago; but

another contradicted him, and counted on his fingers about twenty or thirty days. They described by actions how the ship was beat to pieces, by going up and down against the rocks, till at last it was all scattered abroad.

The next day some others told the same story, or nearly to the same purport, and pointed over the East Bay, which is on the east side of the sound, as to the place where it happened. These stories making me very uneasy about the Adventure, I desired Mr. Wales, and those on shore, to let me know if any of the natives should mention it again, or to send them to me; for I had not heard any thing from them myself. When Mr. Wales came on board to dinner, he found the very people who had told him the story on shore, and pointed them out to me. I inquired about the affair, and endeavoured to come at the truth by every method I could think of. All I could get from them was, *Caurey* (no); and they not only denied every syllable of what they had said on shore, but seemed wholly ignorant of the matter; so that I began to think our people had misunderstood them, and that the story referred to some of their own people and boats.

On the 28th, fresh gales westerly, and fair weather. We rigged and fitted the top-masts. Having gone on a shooting-party to West Bay, we went to the place where I left the hogs and fowls; but saw no vestiges of them, nor of any body having been there since. In our return, having visited the natives, we got some fish in exchange for trifles which we gave them. As we were coming away, Mr. Forster thought he heard the squeaking of a pig in the woods, close by their habitations; probably, they may have those I left with them when last here. In the evening we got on board, with about a dozen and an half of wild fowl, shags, and sea-pies. The sportsmen who had been out in the woods near the ship, were more successful among the small birds.

On the 29th and 30th nothing remarkable happened, except that in the evening of the latter all the natives left us.

The 31st being a fine pleasant day, our botanists went over to Long Island, where one of the party saw a large black boar. As it was described to me, I thought it to be one of those which Captain Furneaux left behind, and had been brought over to this isle by those who had it in keeping. Since they did not destroy those hogs when first in their possession, we cannot suppose they will do it now; so that there is little fear but that this country will, in time, be stocked with these animals, both in a wild and domestic state.

Next day we were visited by a number of strangers, who came from up the sound, and brought with them but little fish. Their chief commodity was green stone or talc, an article which never came to a bad market; and some of the largest pieces of it I had ever seen were got this day.

On the 2d I went over to the east side of the sound, and, without meeting any thing remarkable, returned on board in the evening, when I learnt that the same people who visited us the preceding day had been on board most of this, with their usual article of trade.

On the 3d, Mr. Pickersgill met with some of the natives, who related to him the story of a ship being lost, and the people being killed; but added, with great earnestness, it was not done by them.

On the 4th fine pleasant weather. Most of the natives now retired up the sound. Indeed, I had taken every gentle method to oblige them to be gone; for since these new-comers had been with us, our old friends had disappeared, and we had been without fish. Having gone over to Long Island to look for the hog which had been seen there, I found it to be one of the sows left by Captain Furneaux; the same that was in possession of the natives

when we were last here. From a supposition of its being a boar, I had carried over a sow to leave with him; but on seeing my mistake, brought her back, as the leaving her there would answer no end.

Early in the morning of the 5th, our old friends made us a visit, and brought a seasonable supply of fish. At the same time I embarked in the pinnace with Messrs. Forsters and Sparrman, in order to proceed up the sound. I was desirous of finding the termination of it; or rather, of seeing if I could find any passage out to sea by the S.E., as I suspected from some discoveries I had made when first here. In our way up we met with some fishers, of whom we made the necessary inquiry; and they all agreed that there was no passage to sea by the head of the sound. As we proceeded, we some time after met a canoe, conducted by four men, coming down the sound. These confirmed what the others had said, in regard to there being no passage to sea the way we were going; but gave us to understand that there was one to the east, in the very place where I expected to find it. I now laid aside the scheme of going to the head of the sound, and proceeded to this arm, which is on the S.E. side, about four or five leagues above the Isle of Motuara.

A little within the entrance on the S.E. side, at a place called Kotieghenooee, we found a large settlement of the natives. The chief, whose name was Tringo-boohee, and his people, whom we found to be some of those who had lately been on board the ship, received us with great courtesy. They seemed to be pretty numerous both here and in the neighbourhood. Our stay with them was short, as the information they gave us encouraged us to pursue the object we had in view. Accordingly, we proceeded down the arm E.N.E. and E. by N., leaving several fine coves on both sides, and at last found it to open into the strait by a channel about a mile wide, in which ran out a strong tide; having also observed

one setting down the arm, all the time we had been in it. It was now about four o'clock in the afternoon; and in less than an hour after, this tide ceased, and was succeeded by the flood, which came in with equal strength.

The outlet lies S. E. by E., and N. W. by W., and nearly in the direction of E. S. E., and W. N. W. from Cape Terrawhitte. We found thirteen fathoms water a little within the entrance, clear ground. It seemed to me that a leading wind was necessary to go in and out of this passage, on account of the rapidity of the tides. I, however, had but little time to make observations of this nature, as night was at hand, and I had resolved to return on board. On that account, I omitted visiting a large *hippa*, or strong-hold, built on an elevation on the north side, and about a mile or two within the entrance. The inhabitants of it, by signs, invited us to go to them; but, without paying any regard to them, we proceeded directly for the ship, which we reached by ten o'clock, bringing with us some fish we had got from the natives, and a few birds we had shot. Amongst the latter, were some of the same kind of ducks we found in Dusky Bay; and we have reason to believe that they are all to be met with here. For the natives knew them all by the drawings, and had a particular name for each.

On the 6th, wind at N. E., gloomy weather with rain. Our old friends having taken up their abode near us, one of them, whose name was Pedero, (a man of some note,) made me a present of a staff of honour, such as the chiefs generally carry. In return, I dressed him in a suit of old clothes, of which he was not a little proud. He had a fine person and a good presence; and nothing but his colour distinguished him from an European. Having got him and another into a communicative mood, we began to enquire of them if the Adventure had been there during my absence, and they gave us to understand

in a manner that admitted of no doubt, that soon after we were gone she arrived, that she staid between ten and twenty days, and had been gone ten months. They likewise asserted, that neither she nor any other ship had been stranded on the coast, as had been reported. This assertion, and the manner in which they related the coming and going of the Adventure, made me easy about her; but did not wholly set aside our suspicions of a disaster having happened to some other strangers. Besides what has been already related, we had been told that a ship had lately been here, and was gone to a place called Terato, which is on the north side of the Strait. Whether this story related to the former or no, I cannot say. Whenever I questioned the natives about it, they always denied all knowledge of it; and for some time past had avoided mentioning it. It was but a few days before, that one man received a box on the ear for naming it to some of our people.

After breakfast, I took a number of hands over to Long-Island, in order to catch the sow, to put her to the boar, and remove her to some other place; but we returned without seeing her. Some of the natives had been there not long before us, as their fires were yet burning; and they had undoubtedly taken her away. Pedero dined with us, ate of every thing at table, and drank more wine than any one of us, without being in the least affected by it.

The 7th, fresh gales at N.E. with continual rain.

The 8th, fore-part rain, remainder fair weather. We put two pigs, a boar and a sow, on shore, in the cove next without Cannibal Cove; so that it is hardly possible all the methods I have taken to stock this country with these animals should fail. We had also reason to believe that some of the cocks and hens which I left here still existed, although we had not seen any of them; for an hen's egg was, some days before, found in the woods almost new laid.

On the 9th, wind westerly or N.W. squally, with

rain. In the morning we unmoored, and shifted our birth farther out of the cove, for the more ready getting to sea the next morning; for, at present, the caulkers had not finished the sides, and till this work was done we could not sail. Our friends having brought us a very large and seasonable supply of fish, I bestowed on Pedero a present of an empty oil-jar, which made him as happy as a prince. Soon after, he and his party left the cove, and retired to their proper place of abode, with all the treasure they had received from us. I believe that they gave away many of the things they, at different times, got from us, to their friends, and neighbours, or else parted with them to purchase peace of their more powerful enemies; for we never saw any of our presents after they were once in their possession; and every time we visited them they were as much in want of hatchets, nails, &c. to all appearance, as if they never had had any among them.

I am satisfied that the people in this Sound, who are, upon the whole, pretty numerous, are under no regular form of government, or so united as to form one body politic. The head of each tribe, or family, seems to be respected; and that respect may, on some occasions, command obedience; but I doubt if any amongst them have either a right or power to enforce it. The day we were with Tringo-boohee, the people came from all parts to see us, which he endeavoured to prevent. But though he went so far as to throw stones at some, I observed that very few paid any regard either to his words or actions; and yet this man was spoken of as a chief of some note. I have, before, made some remarks on the evils attending these people for want of union among themselves; and the more I was acquainted with them, the more I found it to be so. Notwithstanding they are cannibals, they are naturally of a good disposition, and have not a little humanity.

In the afternoon a party of us went ashore into one of the coves, where were two families of the natives variously employed; some sleeping, some making mats, others roasting fish and fir roots, and one girl, I observed, was heating of stones. Curious to know what they were for, I remained near her. As soon as the stones were made hot, she took them out of the fire, and gave them to an old woman, who was sitting in the hut. *She* placed them in a heap, laid over them a handful of green celery, and over that a coarse mat, and then squatted herself down, on her heels, on the top of all; thus making a kind of Dutch warming-pan, on which she sat as close as a hare on her seat. I should hardly have mentioned this operation, if I had thought it had no other view than to warm the old woman's backside. I rather suppose it was intended to cure some disorder she might have on her, which the steams arising from the green celery might be a specific for. I was led to think so by there being hardly any celery in the place, we having gathered it long before; and grass, of which there was great plenty, would have kept the stones from burning the mat full as well, if that had been all that was meant. Besides, the woman looked to me sickly, and not in a good state of health.

Mr. Wales from time to time communicated to me the observations he had made in this Sound for determining the longitude, the mean results of which give 174° 25′ 7″½ E. for the bottom of Ship Cove, where the observations were made; and the latitude of it is 41° 5′ 56″½ S. In my chart, constituted in my former voyage, this place is laid down in 184° 54′ 30″ West, equal to 175° 5′ 30″ E. The error of the chart is therefore, 0° 40′ 0″, and nearly equal to what was found at Dusky Bay; by which it appears that the whole of Tavai-poenammoo is laid down 40′ too far east in the said chart, as well as in the journal of the voyage. But the error in Eahei-

no-mauwe is not more than half a degree, or thirty minutes; because the distance between Queen Charlotte's Sound and Cape Palliser has been found to be greater by 10′ of longitude than it is laid down in the chart. I mention these errors, not from a fear that they will affect either navigation or geography, but because I have no doubt of their existence; for, from the multitude of observations which Mr. Wales took, the situation of few parts of the world is better ascertained than Queen Charlotte's Sound. Indeed, I might, with equal truth, say the same of all the other places where we made any stay; for Mr. Wales, whose abilities are equal to his assiduity, lost no one observation that could possibly be obtained. Even the situation of those islands which we passed without touching at them, is, by means of Kendal's watch, determined with almost equal accuracy. The error of the watch from Otaheite to this place was only 43′ 39″¼ in longitude, reckoning at the rate it was found to go at, at that island and at Tanna; but by reckoning at the rate it was going when last at Queen Charlotte's Sound, and from the time of our leaving it, to our return to it again, which was near a year, the error was 19′ 31″, 25 in time, or 4° 52′ 48″ ¾ in longitude. This error cannot be thought great, if we consider the length of time, and that we had gone over a space equal to upwards of three-fourths of the equatorial circumference of the earth, and through all the climates and latitudes from 9° to 71°. Mr. Wales found its rate of going here to be that of gaining 12″, 576, on mean time, per day.

The mean result of all the observations he made for ascertaining the variation of the compass and the dip of the south end of the needle, the three several times we had been here, gave 14° 9′ ⅕ E. for the former, and 64° 36″ ¾ for the latter. He also found, from very accurate observations, that the time of high-water preceded the moon's southing, on the

full and change days, by three hours; and that the greatest rise and fall of the water was five feet ten inches and a half; but there were evident tokens on the beach of its having risen two feet higher than it ever did in the course of his experiments.

BOOK IV.

FROM LEAVING NEW ZEALAND TO OUR RETURN TO ENGLAND.

CHAP. I.

THE RUN FROM NEW ZEALAND TO TERRA DEL FUEGO, WITH THE RANGE FROM CAPE DESEADA TO CHRISTMAS SOUND, AND DESCRIPTION OF THAT PART OF THE COAST.

At daybreak on the 10th, with a fine breeze at W. N. W., we weighed and stood out of the Sound; and, after getting round the Two Brothers, steered for Cape Campbell, which is at the S. W. entrance of the Strait, all sails set, with a fine breeze at north. At four in the afternoon, we passed the Cape, at the distance of four or five leagues, and then steered S. S. E. ½ E. with the wind at N. W. a gentle gale, and cloudy weather.

Next morning, the wind veered round by the west to south, and forced us more to the east than I intended. At seven o'clock in the evening, the snowy mountains bore W. by S., and Cape Palliser N. ½ W. distant sixteen or seventeen leagues; from which Cape I for the third time took my departure. After a few hours' calm, a breeze springing up at north, we steered S. by E. all sails set, with a view of getting into the latitude of 54° or 55°; my intention being to cross this vast ocean nearly in these parallels, and so as to pass over those parts which were left unexplored the preceding summer.

In the morning of the 12th, the wind increased to a fine gale: at noon we observed in latitude 43° 13′ 30″ S., longitude 176° 41′ E., an extraordinary fish of the

whale kind was seen, which some called a sea-monster. I did not see it myself. In the afternoon, our old companions the pintado peterels began to appear.

On the 13th, in the morning, the wind veered to W. S. W. At seven, seeing the appearance of land to the S.W. we hauled up towards it, and soon found it to be a bog-bank. Afterwards we steered S. E. by S. and soon after saw a seal. At noon, latitude, by account, 44° 25′, longitude 177° 31′ E. Foggy weather, which continued all the afternoon. At six in the evening, the wind veered to N. E. by N. and increased to a fresh gale, attended with thick hazy weather; course steered E. E. ¼ S.

On the 14th, A.M., saw another seal. At noon, latitude 45° 54′, longitude 179° 29′ E.

On the 15th, A. M., the wind veered to the westward; the fog cleared away, but the weather continued cloudy. At noon, latitude 47° 30′, longitude 178° 19′ W.; for, having passed the meridian of 180° E., I now reckon my longitude west of the first meridian, viz. Greenwich. In the evening heard penguins, and the next morning saw some sea or rock weed. At noon a fresh gale from the west and fine weather. Latitude observed 49° 33′, longitude 175° 31′ W.

Next morning fresh gales and hazy weather; saw a seal and several pieces of weed. At noon, latitude 51° 12′, longitude 173° 17′ W. The wind veered to the north and N. E. by N., blew a strong gale by squalls, which split an old topgallant sail, and obliged us to double-reef the topsails; but in the evening the wind moderated, and veered to W. N. W. when we loosed a reef out of each topsail, and found the variation of the compass to be 9° 52′ E., being then in the latitude 51° 47′, longitude 172° 21′ W.; and the next morning, the 18th, in the latitude of 52° 25′, longitude 170° 45′ W., it was 10° 26′ E. Towards noon, had moderate but cloudy weather, and a great

swell from the west: some penguins and pieces of sea-weed seen.

On the 19th, steered E. S. E. with a very fresh gale at N., hazy, dirty weather. At noon, latitude 53° 43′, longitude 166° 15′ W.

On the 20th, steered E. by S. with a moderate breeze at N. attended with thick hazy weather. At noon, latitude 54° 8′, longitude 162° 18′ W.

On the 21st, winds mostly from the N. E. a fresh gale attended with thick, hazy, dirty weather. Course S. E. by S., latitude, at noon, 55° 31′, longitude 160° 29′ W.; abundance of blue peterels and some penguins seen.

Fresh gales at N. W. by N. and N. by W., and hazy till towards noon of the 22d, when the weather cleared up, and we observed in latitude 55° 48′ S., longitude 156° 56′ W. In the afternoon had a few hours' calm; after that, the wind came at S. S. E. and S. E. by S. a light breeze, with which we steered east northerly. In the night the aurora australis was visible, but very faint, and no ways remarkable.

On the 23d, in the latitude of 55° 46′ S., longitude 156° 13′ W., the variation was 9° 42′ E. We had a calm from ten in the morning till six in the evening, when a breeze sprung up at west; at first it blew a gentle gale, but afterwards freshened. Our course was now E. ¼ N.

On the 24th, a fresh breeze at N. W. by W. and N. by W. At noon, in latitude 55° 38′ S., longitude 153° 37′ W., foggy in the night, but next day had a fine gale at N. W. attended with clear pleasant weather; course steered E. by N. In the evening, being in the latitude of 55° 8′ S., longitude 148° 10′ W. the variation, by the mean of two compasses, was 6° 35′ ½ E.

Having a steady fresh gale at N. N. W. on the 26th and 27th, we steered east, and at noon, on the latter, were in latitude 55° 6′ S., longitude 138° 56′ W.

I now gave up all hopes of finding any more land

in this ocean, and came to a resolution to steer directly for the west entrance of the Straits of Magalhaens, with a view of coasting the out or south side of Terra del Fuego, round Cape Horn, to the Strait le Maire. As the world has but a very imperfect knowledge of this shore, I thought the coasting of it would be of more advantage, both to navigation and to geography, than any thing I could expect to find in a higher latitude. In the afternoon of this day, the wind blew in squalls, and carried away the main topgallant mast.

A very strong gale northerly, with hazy rainy weather, on the 28th, obliged us to double-reef the fore and main topsail, to hand the mizen topsail, and get down the fore top-gallant yard. In the morning, the bolt rope of the main topsail broke, and occasioned the sail to be spilt. I have observed that the ropes to all our sails, the square sails especially, are not of a size and strength sufficient to wear out the canvass. At noon, latitude 55° 20′ S., longitude 134° 16′ W., a great swell from N. W. albatrosses and blue peterels seen.

Next day towards noon, the wind abating, we loosed all the reefs out of the topsails, rigged another top-gallant mast, and got the yards across. P. M. little wind, and hazy weather; at midnight calm, that continued till noon the next day, when a breeze sprung up at E. with which we stretched to the northward. At this time we were in the latitude 55° 32′ S., longitude 128° 45′ W., some albatrosses and peterels seen. At eight P. M. the wind veering to N. E. we tacked and stood to E.S.E.

On the 1st of December, thick hazy weather, with drizzling rain, and a moderate breeze of wind, which at three o'clock P. M. fell to a calm; at this time in latitude 55° 41′ S., longitude 127° 5′ W. After four hours' calm, the fog cleared away, and we got a wind at S.E. with which we stood N.E.

Next day, a fresh breeze at S.E. and hazy foggy weather, except a few hours in the morning, when we found the variation to be 1° 28′ E., latitude 55° 17′, longitude 125° 41′ W. The variation after this was supposed to increase; for on the 4th, in the morning, being in latitude 53° 21′, longitude 121° 31′ W., it was 3° 16′ E.; in the evening, in latitude 53° 13′, longitude 119° 46′ W. it was 3° 28′ E.; and on the 5th, at six o'clock in the evening, in latitude 53° 8′, longitude 115° 58′ W., it was 4° 1′ E.

For more than twenty-four hours having had a fine gale at S., this enabled us to steer E., with very little deviation to the N.; and the wind now altering to S.W. and blowing a steady fresh breeze, we continued to steer E., inclining a little to S.

On the 6th, had some snow showers. In the evening, being in latitude 53° 13′, longitude 111° 12′, the variation was 4° 58′ E.; and the next morning, being in latitude 58° 16′, longitude 109° 33′, it was 5° 1′ E.

The wind was now at W., a fine pleasant gale, sometimes with showers of rain. Nothing remarkable happened, till the 9th, at noon, when being in the latitude of 53° 37′, longitude 103° 44′ W., the wind veered to N.E. and afterwards came insensibly round to the S., by the E. and S.E. attended with cloudy hazy weather, and some showers of rain.

On the 10th, a little before noon, latitude 54°, longitude 102° 7′ W., passed a small bed of sea-weed. In the afternoon the wind veered to S.W., blew a fresh gale, attended with dark cloudy weather. We steered E. half a point N.; and the next day, at six in the evening, being in latitude 53° 35′, longitude 95° 52′ W., the variation was 9° 58′ E. Many and various sorts of albatrosses about the ship.

On the 12th, the wind veered to the W.N.W. and in the evening to N.; and, at last, left us to a calm. That continued till midnight, when we got a breeze at S.; which, soon after, veering to, and fixing at,

W. we steered E.; and on the 14th, in the morning, found the variation to be 13° 25′ E., latitude 53° 25′, longitude 87° 53′ W.; and in the afternoon, being in the same latitude, and the longitude of 86° 2′ W. it was 15° 3′ E., and increased in such a manner, that on the 15th, in the latitude of 53° 30′, longitude 82° 23′ W., it was 17° E.; and the next evening, in the latitude of 53° 25′, longitude 78° 40′, it was 17° 38′ E. About this time, we saw a penguin and a piece of weed; and the next morning, a seal and some diving peterels. For the three last days, the wind had been at W., a steady fresh gale, attended, now and then, with showers of rain or hail.

At six in the morning of the 17th, being nearly in the same latitude as above, and in the longitude of 77° 10′ W., the variation was 18° 33′ E.; and in the afternoon it was 21° 38′, being at that time in latitude 53° 16′ S., longitude 75° 9′ W. In the morning, as well as in the afternoon, I took some observations to determine the longitude by the watch; and the results, reduced to noon, gave 76° 18′ 30″ W. At the same time, the longitude, by my reckoning, was 76° 17′ W. But I have reason to think, that we were about half a degree more to the west than either the one or the other; our latitude, at the same time, was 53° 21′ S.

We steered E. by N. and E. ½ N. all this day, under all the sail we could carry, with a fine fresh gale at N.W by W. in expectation of seeing the land before night; but not making it till ten o'clock, we took in the studding-sails, top-gallant sails, and a reef in each topsail, and steered E.N.E. in order to make sure of falling in with Cape Deseada.

Two hours after, we made the land, extending from N.E. by N. to E. by S. about six leagues distant. On this discovery, we wore and brought to, with the ship's head to the S., and having sounded, found seventy-five fathoms water, the bottom stone and shells. The land now before us could be no other

than the west coast of Terra del Fuego, and near the west entrance to the Straits of Magalhaens.

As this was the first run that had been made directly across this ocean, in a high southern latitude*, I have been a little particular in noting every circumstance that appeared in the least material; and after all, I must observe that I never made a passage any where of such length, or even much shorter, where so few interesting circumstances occurred. For, if I except the variation of the compass, I know of nothing else worth notice. The weather had been neither unusually stormy nor cold. Before we arrived in the latitude of 50°, the mercury in the thermometer fell gradually from sixty to fifty; and after we arrived in the latitude of 55°, it was generally between forty-seven and forty-five; once or twice it fell to forty-three. These observations were made at noon.

I have now done with the Southern Pacific Ocean; and flatter myself that no one will think that I have left it unexplored; or that more could have been done, in one voyage, towards obtaining that end, than has been done in this.

Soon after we left New Zealand, Mr. Wales contrived, and fixed up an instrument, which very accurately measured the angle the ship rolled, when sailing large and in a great sea; and that in which she lay down, when sailing upon a wind. The greatest angle he observed her to roll was 38°. This was on the 6th of this month, when the sea was not unusually high; so that it cannot be reckoned the greatest roll she had made. The most he observed her to heel or lie down, when sailing upon a wind, was 18°; and this was under double-reefed topsails and courses.

On the 18th, at three in the morning, we sounded again, and found one hundred and ten fathoms, the

* It is not to be supposed that I could know at this time that the Adventure had made the passage before me.

same bottom as before. We now made sail with a fresh gale at N.W. and steered S.E. by E. along the coast. It extended from Cape Deseada, which bore N. 7° E., to E. S.E., a pretty high ragged isle, which lies near a league from the main, and S. 18° E. six leagues from Cape Deseada, bore N. 49° E. distant four leagues; and it obtained the name of Landfall. At four o'clock, we were north and south of the high land of Cape Deseada, distant about nine leagues; so that we saw none of the low rocks said to lie off it. The latitude of this Cape is about 53° S. longitude 74° 40′ W.

Continuing to range the coast, at about two leagues distance, at eleven o'clock we passed a projecting point, which I called Cape Gloucester. It shows a round surface of considerable height, and has much the appearance of being an island. It lies S.S.E., ½ E., distant seventeen leagues from the Isle of Landfall. The coast between them forms two bays, strewed with rocky islets, rocks, and breakers. The coast appeared very broken with many inlets; or rather it seemed to be composed of a number of islands. The land is very mountainous, rocky, and barren, spotted, here and there, with tufts of wood, and patches of snow. At noon Cape Gloucester bore N. distant eight miles, and the most advanced point of land to the S.E. which we judged to be Cape Noir, bore S.E. by S. distant seven or eight leagues. Latitude observed 54° 13′ S. Longitude made from Cape Deseada, 54′ E. From Cape Gloucester, off which lies a small rocky island, the direction of the coast is nearly S.E.; but to Cape Noir, for which we steered, the course is S.S.E., distant about ten leagues.

At three o'clock, we passed Cape Noir, which is a steep rock of considerable height, and the S.W. point of a large island that seemed to lie detached a league or a league and a half from the main land. The land of the Cape, when at a distance from it,

appeared to be an island disjoined from the other; but, on a nearer approach, we found it connected by a low neck of land. At the point of the Cape are two rocks; the one peaked like a sugar-loaf, the other not so high, and showing a rounder surface; and S. by E. two leagues from the Cape are two other rocky islets. This Cape is situated in the latitude of 54° 30′ S. longitude 73° 33′ W.

After passing the two islets, we steered E.S.E. crossing the great bay of St. Barbara. We but just saw the land in the bottom of it; which could not be less than seven or eight leagues from us. There was a space, lying in the direction of E.N.E. from Cape Noir, where no land was to be seen: this may be the Channel of St. Barbara which opens into the Straits of Magalhaens, as mentioned by Frezier. We found the Cape to agree very well with his description; which shows that he laid down the channel from good memoirs. At ten o'clock, drawing near the S.E. point of the bay, which lies nearly in the direction of S. 60° E. from Cape Noir, eighteen leagues distant, we shortened sail, and spent the night standing off and on.

At two o'clock in the morning of the 19th, having made sail, we steered S.E. by E. along the coast, and soon passed the S.E. point of the Bay of St. Barbara, which I called Cape Desolation; because near it commenced the most desolate and barren country I ever saw. It is situated in the latitude of 54° 55′ S., longitude 72° 12′ W. About four leagues to the east of this Cape is a deep inlet, at the entrance of which lies a pretty large island, and some others of less note. Nearly in this situation some charts place a channel leading into the Straits of Magalhaens, under the name of Straits of Jelouzel. At ten o'clock, being about a league and a half from the land, we sounded, and found sixty fathoms water, a bottom of small stones and shells.

The wind, which had been fresh at N. by W. began

to abate, and at noon it fell calm, when we observed in latitude 55° 20′ S., longitude made from Cape Deseada 3° 24′ E. In this situation we were about three leagues from the nearest shore, which was that of an island. This I named Gilbert Isle, after my master. It is nearly of the same height with the rest of the coast, and shows a surface composed of several peaked rocks unequally high. A little to the S.E. of it are some smaller islands, and, without them, breakers.

I have before observed that this is the most desolate coast I ever saw. It seems entirely composed of rocky mountains without the least appearance of vegetation. These mountains terminate in horrible precipices, whose craggy summits spire up to a vast height; so that hardly any thing in nature can appear with a more barren and savage aspect than the whole of this country. The inland mountains were covered with snow, but those on the sea-coast were not. We judged the former to belong to the main of Terra del Fuego, and the latter to be islands, so ranged as apparently to form a coast.

After three hours' calm, we got a breeze at S.E. by E. and having made a short trip to south, stood in for the land; the most advanced point of which, that we had in sight, bore E., distant ten leagues. This is a lofty promontory, lying E.S.E. nineteen leagues from Gilbert Isle, and situated in latitude 55° 26′ S. longitude 70° 25′ W. Viewed from the situation we now were in, it terminated in two high towers; and within them a hill shaped like a sugar-loaf. This wild rock therefore obtained the name of York Minster. Two leagues to the westward of this head appeared a large inlet, the west point of which we fetched in with, by nine o'clock, when we tacked in forty-one fathoms water, half a league from the shore: to the westward of this inlet was another, with several islands lying in the entrance.

During the night between the 19th and 20th, we

had little wind easterly, which in the morning veered to N.E. and N.N.E., but it was too faint to be of use; and at ten, we had a calm, when we observed the ship to drive from off the shore out to sea. We had made the same observation the day before. This must have been occasioned by a current; and the melting of the snow increasing, the inland waters will cause a stream to run out of most of these inlets. At noon, we observed in latitude 55° 39′ 30″ S. York Minster, then bearing N. 15° E., distant five leagues; and Round-hill, just peeping above the horizon, which we judged to belong to the isles of Saint Ildefonso, E. 25° S., ten or eleven leagues distant. At ten o'clock, a breeze springing up at E. by S., I took this opportunity to stand in for the land, being desirous of going into one of the many ports which seemed open to receive us, in order to take a view of the country, and to recruit our stock of wood and water.

In standing in for an opening, which appeared on the east side of York Minster, we had forty, thirty-seven, fifty, and sixty fathoms water, a bottom of small stones and shells. When we had the last soundings we were nearly in the middle between the two points that form the entrance to the inlet, which we observed to branch into two arms, both of them lying in nearly N., and disjoined by a high rocky point. We stood for the eastern branch as being clear of islets; and after passing a black rocky one, lying without the point just mentioned, we sounded and found no bottom with a line of an hundred and seventy fathoms. This was altogether unexpected, and a circumstance that would not have been regarded, if the breeze had continued; but, at this time, it fell calm, so that it was not possible to extricate ourselves from this disagreeable situation. Two boats were hoisted out, and sent a-head to tow; but they would have availed little, had not a breeze sprung up about eight o'clock, at S.W. which put it

in my power either to stand out to sea, or up the inlet. Prudence seemed to point out the former; but the desire of finding a good port, and of learning something of the country, getting the better of every other consideration, I resolved to stand in; and as night was approaching, our safety depended on getting to an anchor. With this view we continued to sound, but always had an unfathomable depth.

Hauling up under the east side of the land which divided the two arms, and seeing a small cove a-head, I sent a boat to sound; and we kept as near the shore as the flurries from the land would permit, in order to be able to get into this place, if there should be anchorage. The boat soon returned, and informed us that there was thirty and twenty-five fathoms water, a full cable's length from the shore. Here we anchored in thirty fathoms, the bottom sand and broken shells; and carried out a kedge and hawser, to steady the ship for the night.

CHAP. II.

TRANSACTIONS IN CHRISTMAS SOUND, WITH AN ACCOUNT OF THE COUNTRY AND ITS INHABITANTS.

THE morning of the 21st was calm and pleasant. After breakfast, I set out with two boats to look for a more secure station. We no sooner got round, or above the point, under which the ship lay, than we found a cove in which was anchorage in thirty, twenty, and fifteen fathoms, the bottom stones and sand. At the head of the cove was a stony beach, a valley covered with wood, and a stream of fresh water; so that there was every thing we could expect to find in such a place, or rather more; for we shot three geese out of four that we saw, and caught some young ones, which we afterwards let go.

After discovering and sounding this cove, I sent lieutenant Clerke, who commanded the other boat, on board, with orders to remove the ship into this place, while I proceeded farther up the inlet. I presently saw that the land we were under, which disjoined the two arms, as mentioned before, was an island, at the north end of which the two channels united. After this I hastened on board, and found every thing in readiness to weigh; which was accordingly done, and all the boats sent a-head to tow the ship round the point. But, at that moment, a light breeze came in from the sea too scant to fill our sails; so that we were obliged to drop the anchor again, for fear of falling upon the point, and to carry out a kedge to windward. That being done, we hove up the anchor, warped up to, and weighed the kedge, and proceeding round the point under our stay-sails, there anchored with the best bower, in twenty fathoms; and moored with the other bower, which lay to the north, in thirteen fathoms. In this

position we were shut in from the sea by the point above mentioned, which was in one with the extremity of the inlet to the east. Some islets, off the next point above us, covered us from the N. W., from which quarter the wind had the greatest fetch; and our distance from the shore was about one-third of a mile.

Thus situated, we went to work, to clear a place to fill water, to cut wood, and to set up a tent for the reception of a guard, which was thought necessary; as we had already discovered, that, barren as this country is, it was not without people, though we had not yet seen any. Mr. Wales also got his observatory and instruments on shore; but it was with the greatest difficulty he could find a place of sufficient stability, and clear of the mountains, which every where surrounded us, to set them up in; and at last he was obliged to content himself with the top of a rock, not more than nine feet over.

Next day I sent lieutenants Clerke and Pickersgill, accompanied by some of the other officers, to examine and draw a sketch of the channel on the other side of the island; and I went myself in another boat, accompanied by the botanists, to survey the northern parts of the sound. In my way, I landed on the point of a low isle covered with herbage, part of which had been lately burnt; we likewise saw a hut; signs sufficient that people were in the neighbourhood. After I had taken the necessary bearings, we proceeded round the east end of Burnt Island, and over to what we judged to be the main of Terra del Fuego, where we found a very fine harbour encompassed by steep rocks of vast height, down which ran many limpid streams of water; and at the foot of the rocks, some tufts of trees, fit for little else but fuel.

This harbour, which I shall distinguish by the name of the Devil's Bason, is divided, as it were, into two, an inner and an outer one; and the communication

between them is by a narrow channel five fathoms deep. In the outer bason, I found thirteen and seventeen fathoms water, and in the inner, seventeen and twenty-three. This last is as secure a place as can be, but nothing can be more gloomy. The vast height of the savage rocks which encompass it, deprived great part of it, even on this day, of the meridian sun. The outer harbour is not quite free from this inconvenience, but far more so than the other; it is also rather more commodious, and equally safe. It lies in the direction of north, a mile and an half distant from the east end of Burnt Island. I likewise found a good anchoring-place a little to the west of this harbour, before a stream of water that comes out of a lake or large reservoir, which is continually supplied by a cascade falling into it.

Leaving this place, we proceeded along the shore to the westward, and found other harbours, which I had not time to look into. In all of them is fresh water, and wood for fuel; but except these little tufts of bushes, the whole country is a barren rock, doomed by nature to everlasting sterility. The low islands, and even some of the higher, which lie scattered up and down the sound, are indeed mostly covered with shrubs and herbage, the soil a black rotten turf, evidently composed, by length of time, of decayed vegetables.

I had an opportunity to verify what we had observed at sea; that the sea-coast is composed of a number of large and small islands, and that the numerous inlets are formed by the junction of several channels; at least so it is here. On one of these low islands, we found several huts, which had lately been inhabited; and near them was a good deal of celery, with which we loaded our boat, and returned on board at seven o'clock in the evening. In this expedition we met with little game; one duck, three or four shags, and about that number of rails or seapies, being all we got. The other boat returned on

board some hours before; having found two harbours on the west side of the other channel; the one large, and the other small; but both of them safe and commodious; though, by the sketch Mr. Pickersgill had taken of them, the access to both appeared rather intricate.

I was now told of a melancholy accident which had befallen one of our marines. He had not been seen since eleven or twelve o'clock the preceding night. It was supposed that he had fallen over-board out of the head, where he had been last seen, and was drowned.

Having fine pleasant weather on the 23d, I sent lieutenant Pickersgill in the cutter, to explore the east side of the sound, and went myself in the pinnace to the west side, with an intent to go round the island, under which we were at anchor, (and which I shall distinguish by the name of Shag island), in order to view the passage leading to the harbours Mr. Pickersgill had discovered the day before, on which I made the following observations. In coming from sea, leave all the rocks and islands, lying off and within York Minster, on your larboard side; and the black rock, which lies off the south end of Shag island, on your starboard; and when abreast of the south end of that island, haul over for the west shore, taking care to avoid the beds of weeds you will see before you, as they always grow on rocks; some of which I have found twelve fathoms under water; but it is always best to keep clear of them. The entrance to the large harbour, or Port Clerke, is just to the north of some low rocks lying off a point on Shag Island. This harbour lies in W. by S. a mile and an half, and hath in it from twelve to twenty-four fathoms depth, wood and fresh water. About a mile without, or to the southward of Port Clerke, is, or seemed to be, another which I did not examine. It is formed by a large island, which covers it from the south and east winds. Without this

island, that is, between it and York Minster, the sea seemed strewed with islets, rocks, and breakers. In proceeding round the south end of Shag Island, we observed the shags to breed in vast numbers in the cliffs of the rocks. Some of the old ones we shot, but could not come at the young ones, which are, by far, the best eating. On the east side of the island we saw some geese; and having with difficulty landed, we killed three, which at this time was a valuable acquisition.

About seven in the evening we got on board, where Mr. Pickersgill had arrived but just before. He informed me that the land opposite to our station was an island, which he had been round; that, on another, more to the north, he found many *terns'* eggs, and that without the great island, between it and the east head, lay a cove in which were many geese; one only of which he got, besides some young goslins.

This information of Mr. Pickersgill induced me to make up two shooting parties next day; Mr. Pickersgill and his associates going in the cutter, and myself and the botanists in the pinnace. Mr. Pickersgill went by the N. E. side of the large island above mentioned, which obtained the name of Goose Island; and I went by the S. W. side. As soon as we got under the island, we found plenty of shags in the cliffs, but, without staying to spend our time and shot upon these, we proceeded on, and presently found sport enough; for, in the south of the island, were abundance of geese. It happened to be the moulting season; and most of them were on shore for that purpose, and could not fly. There being a great surf, we found great difficulty in landing, and very bad climbing over the rocks when we were landed; so that hundreds of the geese escaped us, some into the sea, and others up into the island. We, however, by one means or other, got sixty-two; with which we returned on board, all heartily tired; but the ac-

quisition we had made overbalanced every other consideration, and we sat down with a good appetite to supper, on part of what the preceding day had produced. Mr. Pickersgill and his associates had got on board some time before us with fourteen geese; so that I was able to make distribution to the whole crew, which was the more acceptable, on account of the approaching festival; for, had not Providence thus singularly provided for us, our Christmas cheer must have been salt beef and pork.

I now learnt that a number of the natives, in nine canoes, had been along-side the ship; and some on board. Little address was required to persuade them to either; for they seemed to be well enough acquainted with Europeans, and had, amongst them, some of their knives.

The next morning, the 25th, they made us another visit. I found them to be of the same nation I had formerly seen in Success-Bay; and the same which M. de Bougainville distinguishes by the name of Pecheras; a word which these had, on every occasion, in their mouths. They are a little, ugly, half-starved, beardless race. I saw not a tall person amongst them. They were almost naked; their clothing was a seal-skin; some had two or three sewed together, so as to make a cloak which reached to the knees; but the most of them had only one skin, hardly large enough to cover their shoulders; and all their lower parts were quite naked. The women, I was told, cover their nakedness with a flap of a seal-skin, but in other respects are clothed like the men. They, as well as the children, remained in the canoes. I saw two young children at the breast entirely naked; thus they are inured from their infancy to cold and hardships. They had with them bows and arrows, and darts, or rather harpoons, made of bone, and fitted to a staff. I suppose they were intended to kill seals and fish; they may also kill whales with them, as the Esquimaux do. I know not if they resemble

them in their love of train-oil; but they, and every thing they had, smelt most intolerably of it. I ordered them some biscuit, but did not observe them so fond of it as I had been told. They were much better pleased when I gave them some medals, knives, &c.

The women and children, as before observed, remained in the canoes. These were made of bark; and in each was a fire, over which the poor creatures huddled themselves. I cannot suppose that they carry a fire in their canoes for this purpose only; but rather that it may be always ready to remove ashore wherever they land; for let their method of obtaining fire be what it may, they cannot be always sure of finding dry fuel that will kindle from a spark. They likewise carry in their canoes large seal hides, which, I judged, were to shelter them when at sea, and to serve as covering to their huts on shore; and occasionally to be used for sails.

They all retired before dinner, and did not wait to partake of our Christmas cheer. Indeed I believe no one invited them, and for good reasons; for their dirty persons, and the stench they carried about them, were enough to spoil the appetite of any European; and that would have been a real disappointment, as we had not experienced such fare for some time. Roast and boiled geese, goose-pye, &c. was a treat little known to us; and we had yet some Madeira wine left, which was the only article of our provision that was mended by keeping. So that our friends in England, did not, perhaps, celebrate Christmas more cheerfully than we did.

On the 26th, little wind, next to a calm, and fair weather, except in the morning, when we had some showers of rain. In the evening, when it was cold, the natives made us another visit; and it being distressing to see them stand trembling and naked on the deck, I could do no less than to give them some baize and old canvass to cover themselves.

Having already completed our water, on the 27th I ordered the wood, tent, and observatory to be got on board; and, as this was work for the day, a party of us went in two boats to shoot geese, the weather being fine and pleasant. We proceeded round by the south side of Goose Island, and picked up in all thirty-one. On the east side of the island, to the north of the east point, is good anchorage, in seventeen fathoms water, where it is entirely land-locked. This is a good place for ships to lie in that are bound to the west. On the north side of this isle, I observed three fine coves, in which were both wood and water; but it being near night, I had no time to sound them; though I doubt not, there is anchorage. The way to come at them is by the west end of the island.

When I returned on board, I found every thing got off the shore, and the launch in; so that we now only waited for a wind to put to sea. The festival, which we celebrated at this place, occasioned my giving it the name of Christmas Sound. The entrance, which is three leagues wide, is situated in the latitude of 55° 27′ S., longitude 70° 16′ W.; and in the direction of N. 37° W. from St. Ildefonso Isles, distant ten leagues. These isles are the best landmark for finding the sound. York Minster, which is the only remarkable land about it, will hardly be known by a stranger from any description that can be given of it, because it alters its appearance according to the different situations it is viewed from. Besides the black rock, which lies off the end of Shag Island, there is another about midway between this and the east shore. A copious description of this sound is unnecessary, as few would be benefited by it. The sketch which accompanies this journal will be a sufficient guide for such ships as chance may bring hither. Anchorage, tufts of wood, and fresh water, will be found in all the coves and harbours. I would advise no one to anchor very near the shore for the sake of having a moderate depth

of water; because there I generally found a rocky bottom.

The refreshments to be got here are precarious, as they consist chiefly of wild fowl, and may probably never be found in such plenty as to supply the crew of a ship; and fish, so far as we can judge, are scarce. Indeed the plenty of wild fowl made us pay less attention to fishing. Here are, however, plenty of muscles, not very large, but well tasted; and very good celery is to be met with on several of the low islets, and where the natives have their habitations. The wild-fowl are geese, ducks, sea-pies, shags, and that kind of gull so often mentioned in this journal under the name of Port Egmont hen. Here is a kind of duck, called by our people race-horses, on account of the great swiftness with which they run on the water; for they cannot fly, the wings being too short to support the body in the air. This bird is at the Falkland Islands, as appears by Pernety's journal.* The geese too are there, and seem to be very well described under the name of bustards. They are much smaller than our English tame geese, but eat as well as any I ever tasted. They have short black bills and yellow feet. The gander is all white; the female is spotted black and white, or grey with a large white spot on each wing. Besides the bird above mentioned, here are several other aquatic, and some land ones; but of the latter not many.

From the knowlege which the inhabitants seem to have of Europeans, we may suppose that they do not live here continually, but retire to the north during the winter. I have often wondered that these people do not clothe themselves better, since nature has certainly provided materials. They might line their seal-skin cloaks with the skins and feathers of aquatic birds; they might make their cloaks larger, and employ the same skins for other parts of clothing; for I cannot suppose they are scarce with them.

* See Pernety's Journal, p. 244, and p. 213.

They were ready enough to part with those they had to our people; which they hardly would have done, had they not known where to have got more. In short, of all the nations I have seen, the Pecheras are the most wretched. They are doomed to live in one of the most inhospitable climates in the world, without having sagacity enough to provide themselves with such conveniences as may render life in some measure more comfortable.

Barren as this country is, it abounds with a variety of unknown plants, and gave sufficient employment to Mr. Forster and his party. The tree which produceth the Winter's bark, is found here in the woods, as is the holly-leaved barberry, and some other sorts which I know not, but I believe are common in the Straits of Magalhaens. We found plenty of a berry which we called the cranberry, because they are nearly of the same colour, size, and shape. It grows on a bushy plant, has a bitterish taste, rather insipid; but may be eaten either raw or in tarts, and is used as food by the natives.

CHAP. III.

RANGE FROM CHRISTMAS SOUND, ROUND CAPE HORN, THROUGH SRAIT LE MAIRE, AND ROUND STATEN LAND; WITH AN ACCOUNT OF THE DISCOVERY OF A HARBOUR IN THAT ISLAND, AND A DESCRIPTION OF THE COASTS.

At four o'clock in the morning on the 28th, we began to unmoor; and at eight weighed and stood out to sea, with a light breeze at N.W. which afterwards freshened, and was attended with rain. At noon, the east point of the sound (Point Nativity), bore N. ¼ W., distant one and a half leagues, and St. Ildefonso Isles S.E. ¼ S., distant seven leagues. The coast seemed to trend in the direction of E. by S., but the weather being very hazy, nothing appeared distinct.

We continued to steer S.E. by E. and E.S.E., with a fresh breeze at W.N.W., till four o'clock P.M., when we hauled to the South, in order to have a nearer view of St. Ildefonso Isles. At this time we were abreast of an inlet, which lies E.S.E. about seven leagues from the sound; but it must be observed that there are some isles without this distinction. At the west point of the inlet, are two high peaked hills; and below them, to the E. two round hills, or isles, which lie in the direction of N.E. and S.W. of each other. An island, or what appeared to be an island, lay in the entrance; and another but smaller inlet appeared to the west of this; indeed, the coast appeared indented and broken as usual.

At half-past five o'clock, the weather clearing up, gave us a good sight of Ildefonso Isles. They are a group of islands and rocks above water, situated above six leagues from the main, and in the latitude of 55° 53′ S., longitude 69° 41′ W.

We now resumed our course to the east; and, at sun-set, the most advanced land bore S.E. by E. ¼ E.; and a point, which I judged to be the west point of Nassau Bay, discovered by the Dutch fleet under the command of Admiral Hermite in 1624, bore N. 80° E., six leagues distant. In some charts, this point is called false Cape Horn, as being the southern point of Terra del Fuego. It is situated in latitude 55° 39′ S. From the inlet above-mentioned to this false cape, the direction of the coast is nearly E., half a point S., distant fourteen or fifteen leagues.

At ten o'clock, having shortened sail, we spent the night in making short boards under the top-sails, and at three next morning, made sail, and steered S.E. by S. with a fresh breeze at W.S.W., the weather somewhat hazy. At this time, the west entrance to Nassau Bay extended from N. by E. to N. ½ E., and the south side of Hermite's Isles, E. by S. At four, *Cape Horn*, for which we now steered, bore E. by S. It is known, at a distance, by a high round hill over it. A point to the W. N. W. shows a surface not unlike this; but their situations alone will always distinguish the one from the other.

At half past seven, we passed this famous *cape*, and entered the Southern Atlantic Ocean. It is the very same point of land I took for the cape, when I passed it in 1769, which at that time I was doubtful of. It is the most southern extremity on a group of islands of unequal extent, lying before Nassau Bay, known by the name of Hermite Islands, and is situated in the latitude of 55° 58′, and in the longitude of 68° 13′ west, according to the observations made of it in 1769. But the observations, which we had in Christmas Sound, and reduced to the cape, by the watch, and others, which we had afterwards, and reduced back to it by the same means, place it in 67° 19′. It is most probable that a mean between the two, viz. 67° 46′ will be nearest the truth. On the N. W. side of the cape are two peaked rocks

like sugar loaves. They lie N. W. by N. and S. E. by S., by compass, of each other. Some other straggling low rocks lie west of the cape, and one south of it; but they are all near the shore. From Christmas Sound to Cape Horn, the course is E. S. E. ¼ E. distant thirty-one leagues. In the direction of E. N. E., three leagues from Cape Horn, is a rocky point, which I called Mistaken Cape, and is the southern point of the easternmost of Hermite Isles. Between these two capes there seemed to be a passage directly into Nassau Bay; some small isles were seen in the passage; and the coast, on the west side, had the appearance of forming good bays or harbours. In some charts, Cape Horn is laid down as belonging to a small island. This was neither confirmed, nor can it be contradicted by us; for several breakers appeared in the coast, both to the east and west of it; and the hazy weather rendered every object indistinct. The summits of some of the hills were rocky, but the sides and valleys seemed covered with a green turf, and wooded in tufts.

From Cape Horn we steered E. by N. ½ N. which direction carried us without the rocks that lie off Mistaken Cape. These rocks are white with the dung of fowls; and vast numbers were seen about them. After passing them, we steered N. E. ½ E. and N. E. for Strait Le Maire, with a view of looking into Success Bay, to see if there were any traces of the Adventure having been there. At eight o'clock in the evening, drawing near the strait, we shortened sail, and hauled the wind. At this time the Sugar-loaf on Terra del Fuego bore N. 33° W.; the point of Success Bay, just open of the cape of the same name, bearing N. 20° E.; and Staten Land, extending from N. 53° E. to 67° E. Soon after, the wind died away, and we had light airs and calms by turns till near noon the next day; during which time we were driven by the current over to Staten Land.

The calm being succeeded by a light breeze at N. N.W. we stood over for Success Bay, assisted by the currents, which set to the north. Before this, we had hoisted our colours, and fired two guns; and soon after, saw a smoke rise out of the woods, above the south point of the bay; which I judged was made by the natives, as it was at the place where they resided when I was here in 1769. As soon as we got off the bay, I sent lieutenant Pickersgill to see if any traces remained of the Adventure having been there lately; and in the mean time we stood on and off with the ship. At two o'clock, the current turned and set to the south; and Mr. Pickersgill informed me when he returned, that it was falling water on shore; which was contrary to what I had observed when I was here before; for I thought then that the flood came from the north. Mr. Pickersgill saw not the least signs of any ship having been there lately. I had inscribed our ship's name on a card, which he nailed to a tree at the place where the Endeavour watered. This was done with a view of giving Captain Furneaux some information, in case he should be behind us and put in here.

On Mr. Pickersgill's landing, he was courteously received by several of the natives, who were cloathed in guanicoe and seal skins, and had on their arms bracelets, made of silver wire, and wrought not unlike the hilt of a sword, being no doubt the manufacture of some Europeans. They were the same kind of people we had seen in Christmas Sound; and, like them, repeated the word Pechera on every occasion. One man spoke much to Mr. Pickersgill, pointing first to the ship and then to the bay, as if he wanted her to come in. Mr. Pickersgill said the bay was full of whales and seals; and we had observed the same in the strait, especially on the Terra del Fuego side, where the whales, in particular, are exceedingly numerous.

As soon as the boat was hoisted in, which was not

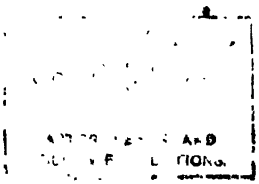
till near six o'clock, we made sail to the east, with a fine breeze at north. For since we had explored the south coast of Terra del Fuego, I resolved to do the same by Staten Land; which I believed to have been as little known as the former. At nine o'clock the wind freshening, and veering to N.W. we tacked, and stood to S.W. in order to spend the night; which proved none of the best, being stormy and hazy, with rain.

Next morning, at three o'clock, we bore up for the east end of Staten Land, which, at half past four, bore S. 60° E. the west end S. 2° E. and the land of Terra del Fuego S. 40° W. Soon after I had taken these bearings, the land was again obscured in a thick haze, and we were obliged to make way, as it were, in the dark; for it was but now and then we got a sight of the coast. As we advanced to the east, we perceived several islands, of unequal extent, lying off the land. There seemed to be a clear passage between the easternmost and the one next to it, to the west. I would gladly have gone through this passage, and anchored under one of the islands, to have waited for better weather; for on sounding we found only twenty-nine fathoms water; but when I considered that this was running to leeward in the dark, I chose to keep without the islands, and accordingly hauled off to the north. At eight o'clock we were abreast of the most eastern isle, distant from it about two miles, and had the same depth of water as before. I now shortened sail to the three top-sails, to wait for clear weather; for the fog was so thick, that we could see no other land than this island. After waiting an hour, and the weather not clearing up, we bore, and hauled round the east end of the island, for the sake of smooth water and anchorage, if it should be necessary. In hauling round, we found a strong race of a current, like unto broken water; but we had no less than nineteen fathoms. We also saw on the island abundance of seals and birds. This was a

temptation too great for people in our situation to withstand, to whom fresh provisions of any kind were acceptable; and determined me to anchor, in order that we might taste of what we now only saw at a distance. At length, after making a few boards, fishing, as it were, for the best ground, we anchored in twenty-one fathoms water, a stony bottom, about a mile from the island, which extended from N. 18° E. to N. 55° ¼ W.; and soon after, the weather clearing up, we saw Cape St. John, or the east end of Staten Land, bearing S. 75° E., distant four leagues. We were sheltered from the south wind by Staten Land, and from the north wind by the island; the other isles lay to the west, and secured us from that wind; but beside being open to the N. E. and E. we also lay exposed to the N. N. W. winds. This might have been avoided by anchoring more to the west; but I made choice of my situation for two reasons: first, to be near the island we intended to land upon; and secondly, to be able to get to sea with any wind.

After dinner we hoisted out three boats, and landed with a large party of men; some to kill seals; others to catch or kill birds, fish, or what came in our way. To find of the former, it mattered not where we landed; for the whole shore was covered with them; and, by the noise they made, one would have thought the island was stocked with cows and calves. On landing, we found they were a different animal from seals, but in shape and motion exactly resembling them. We called them lions, on account of the great resemblance the male has to that beast. Here were also the same kind of seals which we found in New Zealand, generally known by the name of sea-bears; at least, we gave them that name. They were, in general, so tame, or rather stupid, as to suffer us to come near enough to knock them down with sticks; but the large ones we shot, not thinking it safe to approach them. We also found on the island abundance of penguins and shags; and the latter had young

Christmas Sound, Tierra del Fuego.



ones almost fledged, and just to our taste. Here were geese and ducks, but not many; birds of prey, and a few small birds. In the evening we returned on board, our boats well laden with one thing or other.

Next day being January the 1st, 1775, finding that nothing was wanting but a good harbour to make this a tolerable place for ships to refresh at, whom chance or design might bring hither, I sent Mr. Gilbert over to Staten Land in the cutter, to look for one. Appearances promised success, in a place opposite the ship. I sent also two other boats for the lions, &c. we had killed the preceding day; and soon after, I went myself, and observed the sun's meridian altitude at the N. E. end of the island, which gave the latitude 54° 40′ 5″ south. After shooting a few geese, some other birds, and plentifully supplying ourselves with young shags, we returned on board, laden with sea-lions, sea-bears, &c. The old lions and bears were killed chiefly for the sake of their blubber, or fat, to make oil of; for, except their harslets, which were tolerable, the flesh was too rank to be eaten with any degree of relish. But the young cubs were very palatable; and even the flesh of some of the old lionesses was not much amiss; but that of the old males was abominable. In the afternoon, I sent some people on shore to skin and cut off the fat of those which yet remained dead on shore; for we had already more carcasses on board than necessary; and I went myself, in another boat, to collect birds. About ten o'clock Mr. Gilbert returned from Staten Land, where he found a good port, situated three leagues to the westward of Cape St. John, and in the direction of north, a little easterly, from the N. E. end of the eastern island. It may be known by some small islands lying in the entrance. The channel, which is on the east side of these islands, is half a mile broad. The course in is S. W. by S. turning gradually to W. by S. and west. The harbour lies nearly in this last direction; is almost two miles in

length; in some places near a mile broad; and hath in it from fifty to ten fathoms water, a bottom of mud and sand. Its shores are covered with wood fit for fuel; and in it are several streams of fresh water. On the islands were sea-lions, &c. and such an innumerable quantity of gulls as to darken the air when disturbed, and almost to suffocate our people with their dung. This they seemed to void in a way of defence, and it stunk worse than asafœtida, or as it is commonly called, devil's dung. Our people also saw several geese, ducks, and race-horses, which is also a kind of duck. The day on which this port was discovered, occasioned my calling it New Year's Harbour. It would be more convenient for ships bound to the west, or round Cape Horn, if its situation would permit them, to put to sea with an easterly and northerly wind. This inconvenience, however, is of little consequence, since these winds are never known to be of long duration. The southerly and westerly are the prevailing winds; so that a ship can never be detained long in this port.

As we could not sail in the morning of the 2d, for want of wind, I sent a party of men on shore to the island, on the same duty as before. Towards noon we got a fresh breeze at west; but it came too late, and I resolved to wait till the next morning, when, at four o'clock, we weighed with a fresh gale at N.W. by W. and stood for Cape St. John, which, at half-past six, bore N. by E. distant four or five miles. This cape, being the eastern point of Staten Land, a description of it is unnecessary. It may, however, not be amiss to say, that it is a rock of considerable height, situated in the latitude of 54° 46′ South, longitude 64° 7′ West, with a rocky islet lying close under the north part of it. To the westward of the cape, about five or six miles, is an inlet, which seemed to divide the land; that is, to communicate with the sea to the south; and between this inlet and the cape is a bay; but I cannot say of what depth. In sailing

round the cape, we met with a very strong current from the south: it made a race which looked like breakers; and it was as much as we could do, with a strong gale, to make head against it.

After getting round the cape, I hauled up along the south coast; and as soon as we had brought the wind to blow off the land, it came upon us in such heavy squalls as obliged us to double-reef our topsails. It afterwards fell, by little and little, and at noon ended in a calm. At this time Cape St. John bore N. 20° east, distant three and a half leagues; Cape St. Bartholomew, or the S W. point of Staten Land, S. 83° west; two high detached rocks N. 80° west; and the place where the land seemed to be divided, which had the same appearance on this side, bore N. 15° west, three leagues distant. Latitude observed 54° 56′. In this situation we sounded, but had no bottom, with a line of one hundred and twenty fathoms. The calm was of very short duration, a breeze presently springing up at N. W., but it was too faint to make head against the current, and we drove with it back to the N. N. E. At four o'clock the wind veered at once to S. by E. and blew in squalls attended with rain. Two hours after, the squalls and rain subsided, and the wind returning back to the west, blew a gentle gale. All this time the current set us to the north; so that, at eight o'clock, Cape St. John bore W. N. W. distant about seven leagues. I now gave over plying, and steered S. E. with a resolution to leave the land; judging it to be sufficiently explored to answer the most general purposes of navigation and geography.

CHAP. IV.

OBSERVATIONS, GEOGRAPHICAL AND NAUTICAL, WITH AN ACCOUNT OF THE ISLANDS NEAR STATEN LAND, AND THE ANIMALS FOUND IN THEM.

THE annexed chart will very accurately shew the direction, extent, and position of the coast, along which I have sailed, either in this or my former voyage; and no more is to be expected from it. The latitudes have been determined by the sun's meridian altitude, which we were so fortunate as to obtain every day, except the one we sailed from Christmas Sound; which was of no consequence, as its latitude was known before. The longitudes have been settled by lunar observations, as is already mentioned. I have taken 67° 46′ for the longitude of Cape Horn. From this meridian, the longitudes of all the other parts are deduced by the watch; by which the extent of the whole must be determined to a few miles; and whatever errors there may be in longitude, must be general. But I think it highly probable, that the longitude is determined to within a quarter of a degree. Thus the extent of Terra del Fuego from east to west, and consequently that of the Straits of Magalhaens, will be found less than most navigators have made it.

In order to illustrate this, and to show the situations of the neighbouring lands, and, by this means, make the annexed chart of more general use, I have extended it down to 47° of latitude. But I am only answerable for the inaccuracy of such parts as I have explored myself. In laying down the rest, I had recourse to the following authorities.

The longitude of Cape Virgin Mary, which is the most essential point, as it determines the length of the Straits of Magalhaens, is deduced from Lord Anson, who made 2° 3′ difference of longitude be-

tween it and the Strait Le Maire. Now as the latter lies in 65° 22′, Cape Virgin Mary must lie in 67° 52′, which is the longitude I have assigned to it, and which, I have reason to think, cannot be far from the truth.

The Strait of Magalhaens, and the east coast of Patagonia, are laid down from the observations made by the late English and French navigators.

The position of the west coast of America, from Cape Victory northward, I have taken from the discoveries of *Sarmiento*, a Spanish navigator, communicated to me by Mr. Stuart, F. R. S.

Falkland islands are copied from a sketch taken from Captain M'Bride, who circumnavigated them some years ago in his Majesty's ship Jason; and their distance from the main is agreeable to the run of the Dolphin, under the command of Commodore Byron, from Cape Virgin Mary to Port Egmont, and from Port Egmont to Port Desire; both of which runs were made in a few days; consequently no material errors could happen.

The S. W. coast of Terra del Fuego, with respect to inlets, islands, &c. may be compared to the coast of Norway; for I doubt, if there be an extent of three leagues where there is not an inlet or harbour which will receive and shelter the largest shipping. The worst is, that till these inlets are better known, one has, as it were, to fish for anchorage. There are several lurking rocks on the coast; but happily none of them lie far from land, the approach to which may be known by sounding, supposing the weather so obscure that you cannot see it. For to judge of the whole by the parts we have sounded, it is more than probable that there are soundings all along the coast, and for several leagues out to sea. Upon the whole, this is by no means the dangerous coast it has been represented.

Staten Land lies nearly E. by N. and W. by S. and is ten leagues long in that direction; and no where

above three or four leagues broad. The coast is rocky, much indented, and seemed to form several bays or inlets. It shews a surface of craggy hills which spire up to a vast height, especially near the west end. Except the craggy summits of the hills, the greatest part was covered with trees and shrubs, or some sort of herbage, and there was little or no snow on it. The currents between Cape Deseada and Cape Horn, set from west to east, that is, in the same direction as the coast; but they are by no means considerable. To the east of the cape their strength is much increased, and their direction is N. E. towards Staten Land. They are rapid in Strait Le Maire and along the south coast of Staten Land, and set like a torrent round Cape St. John; where they take a N. W. direction, and continue to run very strong both within and without New Year's isles. While we lay at anchor within this island, I observed that the current was strongest during the flood; and that, on the ebb, its strength was so much impaired, that the ship would sometimes ride head to wind when it was at west and W. N. W. This is only to be understood of the place where the ship lay at anchor; for at the very time we had a strong current setting to the westward, Mr. Gilbert found one of equal strength near the coast of Staten Land, setting to the eastward; though probably this was an eddy current or tide.

If the tides are regulated by the moon, it is high-water by the shore at this place, on the days of the new and full moon, about four o'clock. The perpendicular rise and fall is very inconsiderable, not exceeding four feet at most. In Christmas Sound it is high water at half past two o'clock on the days of the full and change, and Mr. Wales observed it to rise and fall, on a perpendicular, three feet six inches; but this was during the neap-tides, consequently the spring-tides must rise higher. To give such an account of the tides and currents on these coasts as

navigators might depend on, would require a multitude of observations, and in different places, the making of which would be a work of time. I confess myself unprovided with materials for such a task; and believe that the less I say on this subject the fewer mistakes I shall make. But I think I have been able to observe, that in Strait Le Maire, the southerly tide or current, be it flood or ebb, begins to act on the days of new and full moon about four o'clock, which remark may be of use to ships who pass the strait.

Were I bound round Cape Horn to the west, and not in want of wood or water, or any thing that might make it necessary to put into port, I would not come near the land at all. For by keeping out at sea, you avoid the currents, which, I am satisfied, lose their force at ten or twelve leagues from land; and at a greater distance there is none.

During the time we were upon the coast, we had more calms than storms, and the winds so variable that I question if a passage might not have been made from east to west in as short a time as from west to east; nor did we experience any cold weather. The mercury in the thermometer at noon was never below 46°; and while we lay in Christmas Sound, it was generally above temperate. At this place, the variation was 23° 30′ east; a few leagues to the S. W. of Strait Le Maire, it was 24°; and at anchor, within New Year's isles, it was 24° 20′ east.

These isles are, in general, so unlike Staten Land, especially the one on which we landed, that it deserves a particular description. It shews a surface of equal height, and elevated about thirty or forty feet above the sea, from which it is defended by a rocky coast. The inner part of the isle is covered with a sort of sword-grass, very green, and of a great length. It grows on little hillocks, of two or three feet in diameter, and as many or more in height, in large tufts, which seemed to be composed of the roots

of the plant matted together. Among these hillocks are a vast number of paths made by sea-bears and penguins, by which they retire into the centre of the isle. It is, nevertheless, exceedingly bad travelling; for these paths are so dirty that one is sometimes up to the knees in mire. Besides this plant, there are a few other grasses, a kind of heath, and some celery. The whole surface is moist and wet, and on the coast are several small streams of water. The sword-grass, as I call it, seems to be the same that grows in Falkland isles, described by Bougainville as a kind of *gladiolus*, or rather a species of *gramen*,* and named by Pernety, corn-flags.

The animals found on this little spot are sea-lions, sea-bears, a variety of oceanic and some land birds. The sea-lion is pretty well described by Pernety; though those we saw here have not such fore-feet or fins as that he has given a plate of, but such fins as that which he calls the sea-wolf. Nor did we see any of the size he speaks of; the largest not being more than twelve or fourteen feet in length, and perhaps eight or ten in circumference. They are not of that kind described, under the same name, by Lord Anson; but, for aught I know, these would more properly deserve that appellation; the long hair with which the back of the head, the neck and shoulders, are covered, giving them greatly the air and appearance of a lion. The other part of the body is covered with a short hair, little longer than that of a cow or a horse, and the whole is a dark brown. The female is not half so big as the male, and is covered with a short hair of an ash, or light dun colour. They live, as it were, in herds, on the rocks, and near the sea-shore. As this was the time for engendering as well as bringing forth their young, we have seen a male with twenty or thirty females about him, and always very attentive to keep them all to himself, and

* See English Translation of Bougainville, p. 51.

beating off every other male who attempted to come into his flock. Others again had a less number; some no more than one or two; and here and there we have seen one lying growling in a retired place, alone, and suffering neither males nor females to approach him: we judged these were old and superannuated.

The sea-bears are not so large, by far, as the lions, but rather larger than a common seal. They have none of that long hair which distinguishes the lion. Their's is all of an equal length, and finer than that of the lion, something like an otter's; and the general colour is that of iron-grey. This is the kind which the French call sea-wolfs, and the English seals; they are, however, different from the seals we have in Europe and in North America. The lions may too, without any great impropriety, be called overgrown seals; for they are all of the same species. It was not at all dangerous to go among them; for they either fled or lay still. The only danger was in going between them and the sea; for if they took fright at any thing, they would come down in such numbers, that, if you could not get out of their way, you would be run over. Sometimes, when we came suddenly upon them, or waked them out of their sleep (for they are a sluggish sleepy animal), they would raise up their heads, snort and snarl, and look as fierce as if they meant to devour us; but as we advanced upon them, they always run away; so that they are downright bullies.

The penguin is an amphibious bird, so well known to most people, that I shall only observe, they are here in prodigious numbers; so that we could knock down as many as we pleased with a stick. I cannot say they are good eating. I have indeed made several good meals of them; but it was for want of better victuals. They either do not breed here, or else this was not the season; for we saw neither eggs nor young ones.

Shags breed here in vast numbers; and we carried

on board not a few, as they are very good eating. They take certain spots to themselves, and build their nests near the edge of the cliffs on little hillocks, which are either those of the sword-grass, or else they are made by the shags building on them from year to year. There is another sort rather smaller than these, which breed on the cliffs of rocks.

The geese are of the same sort we found in Christmas Sound; we saw but few; and some had young ones. Mr. Forster shot one which was different from these, being larger, with a grey plumage, and black feet. The others make a noise exactly like a duck. Here were ducks, but not many; and several of that sort which we called race-horses. We shot some, and found them to weigh twenty-nine or thirty pounds; those who ate of them said they were very good.

The oceanic birds were gulls, terns, Port Egmont hens, and a large brown bird of the size of an albatross, which Pernety calls quebrantahuessas. We called them Mother Cary's geese, and found them pretty good eating. The land-birds were eagles, or hawks, bald-headed vultures, or what our seamen called turkey buzzards, thrushes, and a few other small birds.

Our naturalists found two new species of birds. The one is about the size of a pigeon, the plumage as white as milk. They feed along shore, probably on shell-fish and carrion; for they have a very disagreeable smell. When we first saw these birds, we thought they were the snow-peterel, but the moment they were in our possession, the mistake was discovered; for they resemble them in nothing but size and colour. These are not web-footed. The other sort is a species of curlews nearly as big as a heron. It has a variegated plumage, the principal colours whereof are light grey, and a long crooked bill.

I had almost forgot to mention that there are seapies, or what we called, when in New Zealand, cur-

lews; but we only saw a few straggling pairs.' It may not be amiss to observe, that the shags are the same bird which Bougainville calls saw-bills; but he is mistaken in saying that the quebrantahuessas are their enemies; for this bird is of the peterel tribe, feeds wholly on fish, and is to be found in all the high southern latitudes.

It is amazing to see how the different animals, which inhabit this little spot, are mutually reconciled. They seem to have entered into a league not to disturb each other's tranquillity. The sea-lions occupy most of the sea-coast; the sea-bears take up their abode in the isle; the shags have post in the highest cliffs; the penguins fix their quarters where there is the most easy communication to and from the sea; and the other birds chuse more retired places. We have seen all these animals mix together, like domestic cattle and poultry in a farm-yard, without one attempting to molest the other. Nay, I have often observed the eagles and vultures sitting on the hillocks among the shags, without the latter, either young or old, being disturbed at their presence. It may be asked how these birds of prey live? I suppose, on the carcasses of seals and birds which die by various causes; and probably not few, as they are so numerous.

This very imperfect account is written more with a view to assist my own memory, than to give information to others. I am neither a botanist nor a naturalist; and have not words to describe the productions of nature, either in the one branch of knowledge or the other.

CHAP. V.

PROCEEDINGS AFTER LEAVING STATEN ISLAND, WITH AN ACCOUNT OF THE DISCOVERY OF THE ISLE OF GEORGIA, AND A DESCRIPTION OF IT.

HAVING left the land in the evening of the 3d, as before mentioned, we saw it again next morning, at three o'clock, bearing W. Wind continued to blow a steady fresh breeze till six P.M. when it shifted in a heavy squall to S.W. which came so suddenly upon us, that we had not time to take in the sails, and was the occasion of carrying away a top-gallant mast, a studding-sail boom, and a fore studding-sail. The squall ended in a heavy shower of rain, but the wind remained at S.W. Our course was S.E. with a view of discovering that extensive coast, laid down by Mr. Dalrymple in his chart, in which is the Gulph of St. Sebastian. I designed to make the western point of that gulph, in order to have all the other parts before me. Indeed, I had some doubt of the existence of such a coast; and this appeared to me the best route for clearing it up, and for exploring the southern part of this ocean.

On the 5th, fresh gales, and wet and cloudy weather. At noon observed in 57° 9′, longitude made from Cape Saint John, 5° 2′ E. At six o'clock, P. M. being in the latitude 57° 21′, and in longitude 57° 45′ W., the variation was 21° 28′ E.

At eight o'clock in the evening of the 6th, being then in the latitude of 58° 9′ S. longitude 53° 14′ W., we close-reefed our top-sails, and hauled to the north, with a very strong gale at W., attended with a thick haze and sleet. The situation just mentioned is nearly the same that Mr. Dalrymple assigns for the S.W. point of the Gulph of St. Sebastian. But as we saw neither land, nor signs of land, I was the more doubtful of its existence, and was fearful, that

by keeping to the south I might miss the land said to be discovered by La Roche in 1675, and by the ship Lion in 1756, which Mr. Dalrymple places in 54° 30′ latitude, and 45° of longitude; but on looking over Danville's Chart, I found it laid down 9° or 10° more to the west; this difference of situation being to me a sign of the uncertainty of both accounts, determined me to get into the parallel as soon as possible, and was the reason of my hauling to the north at this time.

Towards the morning of the 7th, the gale abated, the weather cleared up, and the wind veered to the W.S.W. where it continued till midnight; after which it veered to N.W. Being at this time in the latitude of 56° 4′ S. longitude 53° 36′ W., we sounded, but found no bottom with a line of one hundred and thirty fathoms. I still kept the wind on the larboard-tack, having a gentle breeze and pleasant weather. On the 8th, at noon, a bed of sea-weed passed the ship. In the afternoon, in the latitude of 55° 4′, longitude 51° 45′ W., the variation was 20° 4′ E.

On the 9th, wind at N.E. attended with thick hazy weather; saw a seal, and a piece of sea-weed. At noon, latitude 55° 12′ S. longitude 50° 15′ W., the wind and weather continuing the same till towards midnight, when the latter cleared up, and the former veered to west, and blew a gentle gale. We continued to ply till two o'clock the next morning, when we bore away E., and at eight, E.N.E; at noon, observed in latitude 54° 35′ S., longitude 47° 56′ W., a great many albatrosses and blue peterels about the ship. I now steered E., and the next morning, in the latitude of 54° 38′, longitude 45° 10′ W., the variation was 19° 25′ E. In the afternoon saw several penguins, and some pieces of weed.

Having spent the night lying to, on the 12th, at day-break, we bore away, and steered east northerly, with a fine fresh breeze at W.S.W.; at noon observed in latitude 54° 28′ S., longitude in 42° 8′ W.; that is,

near 3° E. of the situation in which Mr. Dalrymple places the N.E. point of the Gulph of St. Sebastian; but we had no other signs of land than seeing a seal and a few penguins; on the contrary we had a swell from E.S.E. which would hardly have been, if any extensive track of land lay in that direction. In the evening the gale abated, and at midnight it fell calm.

The calm, attended by a thick fog, continued till six next morning, when we got a wind at E., but the fog still prevailed. We stood to the S. till noon, when, being in the latitude of 55° 7′, we tacked and stretched to the N. with a fresh breeze at E. by S. and E.S.E. cloudy weather; saw several penguins and a snow-peterel, which we looked on to be signs of the vicinity of ice. The air too was much colder than we had felt it since we left New Zealand. In the afternoon the wind veered to S.E. and in the night to S.S.E. and blew fresh; with which we stood to the N.E.

At nine o'clock the next morning we saw an island of ice as we then thought; but at noon were doubtful whether it was ice or land. At this time it bore E. ¾ S., distant thirteen leagues; our latitude was 53° 56¼′, longitude 39° 24′ W.; several penguins, small divers, a snow-peterel, and a vast number of blue peterels about the ship. We had but little wind all the morning; and at two P. M. it fell calm. It was now no longer doubted that it was land, and not ice, which we had in sight. It was, however, in a manner wholly covered with snow. We were farther confirmed in our judgment of its being land, by finding soundings at one hundred and seventy-five fathoms, a muddy bottom. The land at this time bore E. by S., about twelve leagues distant. At six o'clock the calm was succeeded by a breeze at N.E., with which we stood to S.E. At first it blew a gentle gale, but afterwards increased so as to bring us under double-reefed top-sails, and was attended with snow and sleet.

We continued to stand to the S.E. till seven in the morning on the 15th, when the wind veering to the S.E. we tacked and stood to the N. A little before we tacked, we saw the land bearing E. by N. At noon the mercury in the thermometer was at 35½°. The wind blew in squalls, attended with snow and sleet, and we had a great sea to encounter. At a lee-lurch which the ship took, Mr. Wales observed her to lie down 42°. At half-past four P. M. we took in the top-sails, got down top-gallant yards, wore the ship, and stood to the S.W. under two courses. At midnight the storm abated, so that we could carry the top-sails double reefed.

At four in the morning of the 16th, we wore and stood to the E., with the wind at S.S.E., a moderate breeze and fair; at eight o'clock saw the land extending from E. by N. to N.E. by N.; loosed a reef out of each top-sail, got top-gallant yards across, and set the sails. At noon observed in latitude 54° 25½′; longitude 38° 18′ W. In this situation we had one hundred and ten fathoms' water; and the land extended from N. ½ W. to E., eight leagues distant. The northern extreme was the same that we first discovered, and it proved to be an island which obtained the name of Willis's Island, after the person who first saw it.

At this time we had a great swell from the S., an indication that no land was near us in that direction; nevertheless, the vast quantity of snow on that in sight, induced us to think it was extensive, and I chose to begin with exploring the northern coast. With this view we bore up for Willis's Island, all sails set, having a fine gale at S.S.W. As we advanced to the N., we perceived another isle lying east of Willis's, and between it and the main. Seeing there was a clear passage between the two isles, we steered for it, and at five o'clock, being in the middle of it, we found it about two miles broad.

Willis's Isle is a high rock of no great extent, near

to which are some rocky islets. It is situated in the latitude of 54° S., longitude 38° 23′ W. The other isle, which obtained the name of Bird Isle, on account of the vast number that were upon it, is not so high, but of greater extent, and is close to the N.E. point of the main land, which I called Cape North.

The S.E. coast of this land, as far as we saw it, lies in the direction of S. 50° E., and N. 50° W. It seemed to form several bays or inlets; and we observed huge masses of snow, or ice, in the bottoms of them, especially in one which lies ten miles to the S.S.E. of Bird Isle.

After getting through the passage, we found the north coast trended E. by N. for about nine miles; and then E. and E. southerly to Cape Buller, which is eleven miles more. We ranged the coast, at one league distance, till near ten o'clock, when we brought to for the night, and, on sounding, found fifty fathoms, a muddy bottom.

At two o'clock in the morning of the 17th, we made sail in for the land, with a fine breeze at S.W.; at four, Willis's Isle bore W. by S., distant thirty-two miles; Cape Buller, to the west of which lie some rocky islets, bore S.W. by W.; and the most advanced point of land to the E., S. 63° E. We now steered along the shore, at the distance of four or five miles, till seven o'clock, when, seeing the appearance of an inlet, we hauled in for it. As soon as we drew near the shore, having hoisted out a boat, I embarked in it, accompanied by Mr. Forster and his party, with a view of reconnoitring the bay before we ventured in with the ship. When we put off from her, which was about four miles from the shore, we had forty fathoms' water. I continued to sound as I went farther in, but found no bottom with a line of thirty-four fathoms, which was the length of that I had in the boat, and which also proved too short to sound the bay, so far as I went up it. I observed it to lie in S.W. by S. about two leagues,

about two miles broad, well sheltered from all winds; and I judged there might be good anchorage before some sandy beaches which are on each side, and likewise near a low flat isle, towards the head of the bay. As I had come to a resolution not to bring the ship in, I did not think it worth my while to go and examine these places; for it did not seem probable that any one would ever be benefited by the discovery. I landed in three different places, displayed our colours, and took possession of the country in his Majesty's name, under a discharge of small arms.

I judged that the tide rises about four or five feet, and that it is high water on the full and change days about eleven o'clock.

The head of the bay, as well as two places on each side, was terminated by perpendicular ice-cliffs of considerable height. Pieces were continually breaking off, and floating out to sea; and a great fall happened while we were in the bay, which made a noise like cannon.

The inner parts of the country were not less savage and horrible. The wild rocks raised their lofty summits, till they were lost in the clouds, and the valleys lay covered with everlasting snow. Not a tree was to be seen, nor a shrub even big enough to make a toothpick. The only vegetation we met with, was a coarse strong-bladed grass, growing in tufts, wild burnet, and a plant like moss, which sprung from the rocks.

Seals, or sea bears, were pretty numerous. They were smaller than those at Staten Land; perhaps the most of those we saw were females; for the shore swarmed with young cubs. We saw none of that sort which we call lions; but there were some of those which the writer of Lord Anson's Voyage describes under that name; at least they appeared to us to be of the same sort; and are, in my opinion, very improperly called lions; for I could not see any grounds for the comparison.

Here were several flocks of penguins, the largest I ever saw; some, which we brought on board, weighed from twenty-nine to thirty-eight pounds. It appears by Bougainville's account of the animals of Falkland Islands, that this penguin is there; and I think it is very well described by him under the name of First Class of Penguins.* The Oceanic birds were albatrosses, common gulls, and that sort which I call Port Egmont hens, terns, shags, divers, the new white bird, and a small bird like those of the Cape of Good Hope, called yellow birds; which, having shot two, we found most delicious food.

All the land birds we saw consisted of a few small larks; nor did we meet with any quadrupeds. Mr. Forster, indeed, observed some dung, which he judged to come from a fox, or some such animal. The lands, or rather rocks, bordering on the sea-coast, were not covered with snow like the inland parts; but all the vegetation we could see on the clear places was the grass above mentioned. The rocks seemed to contain iron. Having made the above observations, we set out for the ship, and got on board a little after twelve o'clock, with a quantity of seals and penguins, an acceptable present to the crew.

It must not, however, be understood that we were in want of provisions: we had yet plenty of every kind; and since we had been on this coast, I had ordered, in addition to the common allowance, wheat to be boiled every morning for breakfast; but any kind of fresh meat was preferred by most on board to salt. For my own part, I was now, for the first time, heartily tired of salt meat of every kind; and though the flesh of the penguins could scarcely vie with bullock's liver, its being fresh was sufficient to make it go down. I called the bay we had been in, Pos-

* See Bougainville, p. 64.

session Bay. It is situated in the latitude of 54° 5′ S., longitude 37° 18′ W., and eleven leagues to the east of Cape North. A few miles to the west of Possession Bay, between it and Cape Buller, lies the Bay of Isles; so named on account of several small isles lying in and before it.

As soon as the boat was hoisted in, we made sail along the coast to the E. with a fine breeze at W.S.W. From Cape Buller, the direction of the coast is S. 72° 30′ E., for the space of eleven or twelve leagues, to a projecting point, which obtained the name of Cape Saunders. Beyond this Cape, is a pretty large bay, which I named Cumberland Bay. In several parts in the bottom of it, as also in some others of less extent, lying between Cape Saunders and Possession Bay, were vast tracks of frozen snow, or ice not yet broken loose. At eight o'clock, being just past Cumberland Bay, and falling little wind, we hauled off the coast, from which we were distant about four miles, and found one hundred and ten fathoms' water.

We had variable light airs and calms till six o'clock the next morning, when the wind fixed at N. and blew a gentle breeze; but it lasted no longer than ten o'clock, when it fell almost to a calm. At noon, observed in latitude 54° 30′ S., being then about two or three leagues from the coast, which extended from N. 59° W. to S. 13° W. The land in this last direction was an isle, which seemed to be the extremity of the coast to the east. The nearest land to us being a projecting point which terminated in a round hillock, was, on account of the day, named Cape Charlotte. On the west side of Cape Charlotte lies a bay, which obtained the name of Royal Bay, and the west point of it was named Cape George. It is the east point of Cumberland Bay, and lies in the direction of S.E. by E. from Cape Saunders, distant seven leagues. Cape George and Cape Charlotte lie in the direction of S. 37° E.,

and N. 37° W., distant six leagues from each other. The isle above mentioned, which was called Cooper's Isle, after my first lieutenant, lies in the direction of S. by E., distant eight leagues from Cape Charlotte. The coast between them forms a large bay, to which I gave the name of Sandwich. The wind being variable all the afternoon, we advanced but little; in the night it fixed at S. and S.S.W., and blew a gentle gale attended with showers of snow.

The 19th was wholly spent in plying, the wind continuing at S. and S.W., clear pleasant weather, but cold. At sun-rise, a new land was seen bearing S.E. ¼ E. It first appeared in a single hill, like a sugar-loaf; some time after, other detached pieces appeared above the horizon near the hill. At noon observed in the latitude 54° 42′ 30″ S., Cape Charlotte bearing N. 38° W., distant four leagues; and Cooper's Isle S. 31° W. In this situation, a lurking rock, which lies off Sandwich Bay, five miles from the land, bore W. ½ N., distant one mile, and near this rock were several breakers. In the afternoon we had a prospect of a ridge of mountains behind Sandwich Bay, whose lofty and icy summits were elevated high above the clouds. The wind continued at S.S.W. till six o'clock, when it fell to a calm. At this time Cape Charlotte bore N. 31° W., and Cooper's Island W.S.W. In this situation we found the variation, by the azimuths, to be 11° 39′, and by the amplitude, 11° 12′ E. At ten o'clock, a light breeze springing up at N., we steered to the S. till twelve, and then brought to for the night.

At two o'clock in the morning of the 20th, we made sail to S.W., round Cooper's Island. It is a rock of considerable height, about five miles in circuit, and one mile from the main. At this isle the main coast takes a S.W. direction for the space of four or five leagues to a point, which I called Cape Disappointment. Off that, are three small isles, the

southernmost of which is green, low, and flat, and lies one league from the Cape.

As we advanced to S.W., land opened off this point, in the direction of N. 60° West, and nine leagues beyond it. It proved an island quite detached from the main, and obtained the name of Pickersgill Island, after my third officer. Soon after, a point of the main, beyond this island, came in sight, in the direction of N. 55° W.; which exactly united the coast at the very point we had seen, and taken the bearing of, the day we first came in with it, and proved to a demonstration that this land, which we had taken for part of a great continent, was no more than an island of seventy leagues in circuit.

Who would have thought that an island of no greater extent than this, situated between the latitude of 54° and 55°, should, in the very height of summer, be in a manner wholly covered many fathoms deep with frozen snow, but more especially the S.W. coast? The very sides and craggy summits of the lofty mountains were cased with snow and ice; but the quantity which lay in the valleys is incredible; and at the bottom of the bays, the coast was terminated by a wall of ice of considerable height. It can hardly be doubted that a great deal of ice is formed here in the winter, which in the spring is broken off and dispersed over the sea; but this island cannot produce the ten-thousandth part of what we saw; so that either there must be more land, or the ice is formed without it. These reflections led me to think that the land we had seen the preceding day might belong to an extensive track; and I still had hopes of discovering a continent. I must confess the disappointment I now met with, did not affect me much, for to judge of the bulk by the sample, it would not be worth the discovery.

I called this land the Isle of Georgia in honour of his Majesty. It is situated between the latitude of 53°

57′ and 54° 57′ S.; and between 38° 13′ and 35° 34′ W. longitude. It extends S.E. by E., and N.W. by W. and is thirty-one leagues long in that direction; and its greatest breadth is about ten leagues. It seems to abound with bays and harbours, the N.E. coast especially; but the vast quantity of ice must render them inaccessible the greatest part of the year; or, at least, it must be dangerous lying in them, on account of the breaking up of the ice-cliffs.

It is remarkable that we did not see a river or stream of fresh water, on the whole coast. I think it highly probable that there are no perennial springs in the country; and that the interior parts, as being much elevated, never enjoy heat enough to melt the snow in such quantities as to produce a river or stream of water. The coast alone receives warmth sufficient to melt the snow, and this only on the N.E. side; for the other, besides being exposed to the cold south winds, is in a great degree deprived of the sun's rays by the uncommon height of the mountains.

It was from a persuasion that the sea-coast of a land situated in the latitude of 54°, could not, in the very height of summer, be wholly covered with snow, that I supposed Bouvet's discovery to be large islands of ice. But after I had seen this land, I no longer hesitated about the existence of Cape Circumcision; nor did I doubt that I should find more land than I should have time to explore. With these ideas I quitted this coast, and directed my course to the E.S.E. for the land we had seen the preceding day.

The wind was very variable till noon, when it fixed at N.N.E., and blew a gentle gale; but it increased in such a manner, that, before three o'clock, we were reduced to our two courses, and obliged to strike top-gallant yards. We were very fortunate in getting clear of the land before this gale overtook us, it

being hard to say what might have been the consequence had it come on while we were on the north coast. This storm was of short duration, for at eight o'clock it began to abate, and at midnight it was little wind. We then took the opportunity to sound, but found no bottom with a line of an hundred and eighty fathoms.

Next day the storm was succeeded by a thick fog, attended with rain; the wind veered to N. W., and at five in the morning it fell calm, which continued till eight, and then we got a breeze southerly, with which we stood to the east till three in the afternoon. The weather then coming somewhat clear, we made sail and steered north in search of the land; but at half past six we were again involved in a thick mist, which made it necessary to haul the wind, and spend the night in making short boards.

We had variable light airs, next to a calm, and thick foggy weather, till half-past seven o'clock in the evening of the 22d, when we got a fine breeze at N., and the weather was so clear that we could see two or three leagues round us. We seized the opportunity, and steered to west; judging we were to the east of the land. After running ten miles to the west, the weather became again foggy, and we hauled the wind, and spent the night under top-sails.

Next morning, at six o'clock, the fog clearing away so that we could see three or four miles, I took the opportunity to steer again to the W., with the wind at E., a fresh breeze; but two hours after, a thick fog once more obliged us to haul the wind to the south. At eleven o'clock, a short interval of clear weather gave us a view of three or four rocky islets, extending from S.E. to E.N.E., two or three miles distant; but we did not see the Sugar-loaf Peak beforementioned. Indeed, two or three miles was the extent of our horizon.

We were well assured that this was the land we

had seen before, which we had now been quite round: and therefore it could be no more than a few detached rocks, receptacles for birds, of which we now saw vast numbers, especially shags, who gave us notice of the vicinity of land before we saw it. These rocks lie in the latitude of 55° S. and S. 75° E., distant twelve leagues from Cooper's Isle.

The interval of clear weather was of very short duration, before we had as thick a fog as ever, attended with rain; on which we tacked in sixty fathoms' water, and stood to the north. Thus we spent our time involved in a continual thick mist; and for aught we knew, surrounded by dangerous rocks. The shags and soundings were our best pilots; for after we had stood a few miles to the north, we got out of soundings, and saw no more shags. The succeeding day and night were spent in making short boards; and at eight o'clock on the 24th, judging ourselves not far from the rocks by some straggling shags which came about us, we sounded in sixty fathoms' water, the bottom stones and broken shells. Soon after, we saw the rocks bearing S.S.W. ½ W., four miles distant, but still we did not not see the Peak. It was, no doubt, beyond our horizon, which was limited to a short distance; and, indeed, we had but a transient sight of the other rocks, before they were again lost in the fog.

With a light air of wind at N., and a great swell from N.E., we were able to clear the rocks to the W.; and at four in the P.M., judging ourselves to be three or four leagues E. and W. of them, I steered S., being quite tired with cruizing about them in a thick fog; nor was it worth my while to spend any more time in waiting for clear weather, only for the sake of having a good sight of a few straggling rocks. At seven o'clock, we had at intervals a clear sky to the W., which gave us a sight of the mountains of the Isle of Georgia, bearing W.N.W., about eight

leagues distant. At eight o'clock we steered S.E. by S., and at ten S.E. by E., with a fresh breeze at N., attended with a very thick fog; but we were, in some measure, acquainted with the sea over which we were running. The rocks above-mentioned obtained the name of Clerke's Rocks, after my second officer, he being the first who saw them.

CHAP. VI.

PROCEEDINGS AFTER LEAVING THE ISLE OF GEORGIA, AND AN ACCOUNT OF THE DISCOVERY OF SANDWICH LAND; WITH SOME REASONS FOR THERE BEING LAND ABOUT THE SOUTH POLE.

On the 25th we steered E.S.E., with a fresh gale at N.N.E., attended with foggy weather, till towards the evening, when the sky becoming clear, we found the variation to be 9° 26′ E., being at this time in the latitude of 56° 16′ S., longitude 32° 9′ W.

Having continued to steer E.S.E., with a fine gale at N.N.W., till daylight next morning, on seeing no land to the E., I gave orders to steer S., being at this time in the latitude of 56° 33′ S., longitude 31° 10′ W. The weather continued clear, and gave us an opportunity to observe several distances of the sun and moon for the correcting our longitude, which at noon was 31° 4′ W., the latitude observed 57° 38′ S. We continued to steer to the S. till the 27th at noon, at which time we were in the latitude of 59° 46′ S., and had so thick a fog that we could not see a ship's length. It being no longer safe to sail before the wind, as we were to expect soon to fall in with ice, I therefore hauled to the E., having a gentle breeze at N.N.E. Soon after, the fog clearing away, we resumed our course to the S. till four o'clock, when it returned again as thick as ever, and made it necessary for us to haul upon a wind.

I now reckoned we were in latitude 60° S., and farther I did not intend to go, unless I observed some certain signs of soon meeting with land; for it would not have been prudent in me to have spent my time in penetrating to the south, when it was at least as probable that a large tract of land might be

found near Cape Circumcision. Besides, I was tired of these high southern latitudes, where nothing was to be found but ice and thick fogs. We had now a long hollow swell from the W., a strong indication that there was no land in that direction; so that I think I may venture to assert that the extensive coast, laid down in Mr. Dalrymple's chart of the ocean between Africa and America, and the Gulph of Saint Sebastian, do not exist.

At seven o'clock in the evening, the fog receding from us a little, gave us a sight of an ice-island, several penguins and some snow peterels; we sounded, but found no ground at one hundred and forty fathoms. The fog soon returning, we spent the night in making boards over that space which we had, in some degree, made ourselves acquainted with in the day.

At eight in the morning of the 28th, we stood to the E., with a gentle gale at N.; the weather began to clear up, and we found the sea strewed with large and small ice; several penguins, snow peterels, and other birds were seen, and some whales. Soon after we had sun-shine, but the air was cold; the mercury in the thermometer stood generally at thirty-five, but at noon it was at 37°; the latitude by observation was 60° 4′ S., longitude 29° 23′ W.

We continued to stand to the E. till half-past two o'clock P. M., when we fell in, all at once, with a vast number of large ice-islands, and a sea strewed with loose ice. The weather too was become thick and hazy, attended with drizzling rain and sleet, which made it the more dangerous to stand in among the ice. For this reason we tacked and stood back to the W., with the wind at N. The ice-islands, which at this time surrounded us, were nearly all of equal height, and showed a flat even surface; but they were of various extent, some being two or three miles in circuit. The loose ice was what had broken from these isles.

Next morning, the wind falling and veering to S.W., we steered N.E., but this course was soon intercepted by numerous ice-islands; and, having but very little wind, we were obliged to steer such courses as carried us the clearest of them; so that we hardly made any advance, one way or other, during the whole day. Abundance of whales and penguins were about us all the time; and the weather fair, but dark and gloomy.

At midnight the wind began to freshen at N.N.E., with which we stood to N.W. till six in the morning of the 30th, when the wind veering to N.N.W., we tacked and stood to N.E., and soon after sailed through a good deal of loose ice, and passed two large islands. Except a short interval of clear weather about nine o'clock, it was continually foggy, with either sleet or snow. At noon we were, by our reckoning, in the latitude of 59° 30′ S., longitude 29° 24′ W.

Continuing to stand to N.E., with a fresh breeze at N.N.W., at two o'clock, we passed one of the largest ice-islands we had seen in the voyage, and some time after passed two others, which were much smaller. Weather still foggy, with sleet; and the wind continued at N. by W., with which we stood to N.E. over a sea strewed with ice.

At half an hour past six in the morning, as we were standing N.N.E. with the wind at W., the fog very fortunately clearing away a little, we discovered land a-head, three or four miles distant. On this we hauled the wind to the N., but finding we could not weather the land on this tack, we soon after tacked in one hundred and seventy-five fathoms water, three miles from the shore, and about half a league from some breakers. The weather then cleared up a little more, and gave us a tolerably good sight of the land. That which we had fallen in with proved three rocky islets of considerable height. The outermost terminated in a lofty peak like a sugar-loaf, and

obtained the name of Freezeland Peak, after the man who first discovered it. Latitude 59° S., longitude 27° W. Behind this peak, that is to the east of it, appeared an elevated coast, whose lofty snow-clad summits were seen above the clouds. It extended from N. by E. to E.S.E. and I called it Cape Bristol, in honour of the noble family of Hervey. At the same time another elevated coast appeared in sight, bearing S.W. by S., and at noon it extended from S.E. to S.S.W., from four to eight leagues distant; at this time the observed latitude was 59° 13′ 30″ S., longitude 27° 45′ W. I called this land Southern Thule, because it is the most southern land that has ever yet been discovered. It shows a surface of vast height, and is every where covered with snow. Some thought they saw land in the space between Thule and Cape Bristol. It is more than probable that these two lands are connected, and that this space is a deep bay, which I called Forster's Bay.

At one o'clock, finding that we could not weather Thule, we tacked and stood to the north, and at four, Freezeland Peak bore E., distant three or four leagues. Soon after it fell little wind, and we were left to the mercy of a great westerly swell, which set right upon the shore. We sounded, but a line of two hundred fathoms found no bottom. At eight o'clock, the weather, which had been very hazy, clearing up, we saw Cape Bristol bearing E.S.E., and terminating in a point to the north, beyond which we could see no land. This discovery relieved us from the fear of being carried by the swell on the most horrible coast in the world, and we continued to stand to the north all night, with a light breeze at W.

On the 1st of February, at four o'clock in the morning, we got sight of a new coast, which at six o'clock bore N. 60° E. It proved a high promontory, which I named Cape Montagu, situated in latitude 58° 27′ S., longitude 26° 44′ W., and seven or eight leagues to the north of Cape Bristol. We saw land from space

to space between them, which made me conclude that the whole was connected. I was sorry I could not determine this with greater certainty; but prudence would not permit me to venture near a coast, subject to thick fogs, on which there was no anchorage; where every port was blocked or filled up with ice; and the whole country, from the summits of the mountains, down to the very brink of the cliffs which terminate the coast, covered, many fathoms thick, with everlasting snow. The cliffs alone was all which was to be seen like land.

Several large islands lay upon the coast; one of which attracted my notice. It had a flat surface, was of considerable extent both in height and circuit, and had perpendicular sides, on which the waves of the sea had made no impression; by which I judged that it had not been long from land, and that it might have lately come out of some bay on the coast, where it had been formed.

At noon we were east and west of the northern part of Cape Montagu, distant about five leagues, and Freezeland Peak bore S. 16° E., distant twelve leagues; latitude observed 58° 25′ S. In the morning the variation was 10° 11′ E. At two in the afternoon, as we were standing to the north, with a light breeze at S.W. we saw land bearing N. 25′ E., distant fourteen leagues. Cape Montagu bore at this time, S. 66° E.; at eight it bore S. 40° E.; Cape Bristol, S. by E.; the new land extending from N. 40° to 52° E.; and we thought we saw land still more to the E., and beyond it.

Continuing to steer to the north all night, at six o'clock the next morning, a new land was seen bearing N. 12° E., about ten leagues distant. It appeared in two hummocks just peeping above the horizon; but we soon after lost sight of them; and having got the wind at N.N.E., a fresh breeze, we stood for the northernmost land we had seen the day before, which at this time bore E.S.E. We fetched

in with it by ten o'clock, but could not weather it, and were obliged to tack three miles from the coast, which extended from E. by S. to S.E., and had much the appearance of being an island of about eight or ten leagues' circuit. It shows a surface of considerable height, whose summit was lost in the clouds, and, like all the neighbouring lands, covered with a sheet of snow and ice, except on a projecting point on the north side, and two hills seen over this point, which probably might be two islands. These only were clear of snow, and seemed covered with a green turf. Some large ice-islands lay to the N.E., and some others to the S.

We stood off till noon, and then tacked for the land again, in order to see whether it was an island or no. The weather was now become very hazy, which soon turning to a thick fog, put a stop to discovery, and made it unsafe to stand for the shore; so that after having run the same distance in, as we had run off, we tacked and stood to N.W. for the land we had seen in the morning, which was yet at a considerable distance. Thus we were obliged to leave the other, under the supposition of its being an island, which I named Saunders, after my honourable friend Sir Charles. It is situated in the latitude of 57° 49′ S., longitude 26° 44′ W.; and N., distant thirteen leagues from Cape Montagu.

At six o'clock in the evening, the wind shifting to the W., we tacked, and stood to the N., and at eight the fog clearing away, gave us a sight of Saunders's isle, extending from S.E. by S. to E.S.E. We were still in doubt if it were an island; for, at this time, land was seen bearing E. by S., which might, or might not be connected with it; it might also be the same that we had seen the preceding evening. But, be this as it may, it was now necessary to take a view of the land to the north before we proceeded any farther to the east. With this intention, we stood to the north, having a light breeze at W. by S., which, at two

o'clock in the morning of the 3d, was succeeded by a calm that continued till eight, when we got the wind at E. by S., attended with hazy weather. At this time we saw the land we were looking for, and which proved to be two isles. The day on which they were discovered, was the occasion of calling them Candlemas isles; latitude 57° 11′ S., longitude 27° 6′ W. They are of no great extent, but of considerable height, and were covered with snow. A small rock was seen between them, and perhaps there may be more; for the weather was so hazy that we soon lost sight of the islands, and did not see them again till noon, at which time they bore W., distant three or four leagues.

As the wind kept veering to the S. we were obliged to stand to the N.E., in which route we met with several large ice-islands, loose ice, and many penguins; and, at midnight, came at once into water uncommonly white, which alarmed the officer of the watch so much that he tacked the ship instantly. Some thought it was a float of ice, others that it was shallow water; but as it proved neither, probably it was a shoal of fish.

We stood to the south till two o'clock next morning, when we resumed our course to the E., with a faint breeze at S.S.E., which having ended in a calm, at six, I took the opportunity of putting a boat in the water to try if there were any current; and the trial proved there was none. Some whales were playing about us, and abundance of penguins; a few of the latter were shot, and they proved to be of the same sort that we had seen among the ice before, and different both from those on Staten Land, and from those at the isle of Georgia. It is remarkable, that we had not seen a seal since we left that coast. At

n we were in the latitude of 56° 44′ S., longitude 25° 33′ W. At this time we got a breeze at E., with which we stood to the S., with a view of gaining the coast we had left; but at eight o'clock the wind

shifted to the S., and made it necessary to tack and stand to the E; in which course we met with several ice-islands and some loose ice, the weather continuing hazy with snow and rain.

No penguins were seen on the 5th, which made me conjecture that we were leaving the land behind us, and that we had already seen its northern extremity. At noon we were in the latitude of 57° 8′ S., longitude 23° 34′ W., which was 3° of longitude to the east of Saunders's isle. In the afternoon the wind shifted to the W., this enabled us to stretch to the S., and to get into the latitude of the land, that, if it took an east direction, we might again fall in with it.

We continued to steer to the S. and S.E. till next day at noon, at which time we were in the latitude of 58° 15′ S., longitude 21° 34′ W., and seeing neither land nor signs of any, I concluded that what we had seen, which I named Sandwich Land, was either a group of islands, or else a point of the continent; for I firmly believe that there is a track of land near the pole which is the source of most of the ice that is spread over this vast Southern Ocean. I also think it probable that it extends farthest to the north opposite the southern Atlantic and Indian Oceans, because ice was always found by us farther to the north in these oceans than any where else, which I judge could not be, if there were not land to the S.; I mean a land of considerable extent. For if we suppose that no such land exists, and that ice may be formed without it, it will follow of course that the cold ought to be every where nearly equal round the pole, as far as 70° or 60° of latitude, or so far as to be beyond the influence of any of the known continents; consequently we ought to see ice every where under the same parallel, or near it; and yet the contrary has been found. Very few ships have met with ice going round Cape Horn; and we saw but little below the sixtieth degree of latitude, in the

Southern Pacific Ocean. Whereas in this ocean, between the meridian of 40° W. and 50° or 60° E., we found ice as far N. as 51°. Bouvet met with some in 48°; and others have seen it in a much lower latitude. It is true, however, that the greatest part of this southern continent (supposing there is one) must lie within the polar circle, where the sea is so pestered with ice that the land is thereby inaccessible. The risk one runs in exploring a coast, in these unknown and icy seas, is so very great, that I can be bold enough to say that no man will ever venture farther than I have done; and that the lands which may lie to the south will never be explored. Thick fogs, snow-storms, intense cold, and every other thing that can render navigation dangerous, must be encountered; and these difficulties are greatly heightened, by the inexpressibly horrid aspect of the country; a country doomed by nature never once to feel the warmth of the sun's rays, but to lie buried in everlasting snow and ice. The ports which may be on the coast, are, in a manner, wholly filled up with frozen snow of vast thickness; but if any should be so far open as to invite a ship into it, she would run a risk of being fixed there for ever, or of coming out in an ice-island. The islands and floats on the coast, the great falls from the ice-cliffs in the port, or a heavy snow-storm attended with a sharp frost, would be equally fatal.

After such an explanation as this, the reader must not expect to find me much farther to the south. It was, however, not for want of inclination, but for other reasons. It would have been rashness in me to have risked all that had been done during the voyage, in discovering and exploring a coast, which, when discovered and explored, would have answered no end whatever, or have been of the least use, either to navigation or geography, or indeed to any other science. Bouvet's discovery was yet before us, the existence of which was to be cleared up; and besides

all this, we were not now in a condition to undertake great things; nor indeed was there time, had we been ever so well provided.

These reasons induced me to alter the course to E., with a very strong gale at N., attended with an exceedingly heavy fall of snow. The quantity which lodged in our sails was so great, that we were frequently obliged to throw the ship up in the wind to shake it out of them, otherwise neither they nor the ship could have supported the weight. In the evening it ceased to snow; the weather cleared up; the wind backed to the W.; and we spent the night in making two short boards, under close-reefed top-sails and fore-sail.

At day-break on the 7th, we resumed our course to the E., with a very fresh gale at S.W. by W., attended by a high sea from the same direction. In the afternoon, being in the latitude of 58° 24′ S., longitude 16° 19′ W., the variation was 1° 52′ E. Only three ice-islands seen this day. At eight o'clock, shortened sail, and hauled the wind to the S.E. for the night, in which we had several showers of snow and sleet.

On the eighth, at day-light, we resumed our east course with a gentle breeze and fair weather. After sun-rise, being then in the latitude of 58° 30′ S., longitude 15° 14′ W.; the variation, by the mean results of two compasses, was 2° 43′ E. These observations were more to be depended on than those made the night before, there being much less sea now than then. In the afternoon, we passed three ice-islands. This night was spent as the preceding.

At six next morning, being in the latitude of 58° 27′ S., longitude 13° 4′ W., the variation was 26′ E., and in the afternoon, being in the same latitude, and about a quarter of a degree more to the E., it was 2′ W. Therefore this last situation must be in or near the line in which the compass has no variation. We had a calm the most part of the day. The

weather fair and clear, excepting now and then a snow shower. The mercury in the thermometer at noon rose to 40; whereas for several days before, it had been no higher than 36 or 38. We had several ice-islands in sight, but no one thing that could induce us to think that any land was in our neighbourhood. At eight in the evening, a breeze sprung up at S.E., with which we stood to N.E.

During the night the wind freshened and veered to south, which enabled us to steer east. The wind was attended with showers of sleet and snow till daylight, when the weather became fair, but piercing cold, so that the water on deck was frozen, and at noon the mercury in the thermometer was no higher than 34½. At six o'clock in the morning, the variation was 23′ west, being then in the latitude of 58° 15′ S., longitude 11° 41′ W., and at six in the evening, being in the same latitude, and in the longitude of 9° 24′ W., it was 1° 51′ W. In the evening the wind abated; and during the night it was variable between south and west. Ice-islands continually in sight.

On the 11th, wind westerly, light airs attended with heavy showers of snow in the morning; but, as the day advanced, the weather became fair, clear, and serene. Still continuing to steer east, at noon we observed in latitude 58° 11′, longitude at the same time 7° 55′ west. Thermometer 34½. In the afternoon we had two hours' calm, after which we had faint breezes between the N. E. and S. E.

At six o'clock in the morning of the 12th, being in the latitude of 58° 23′ S., longitude 6° 54′ W., the variation was 3° 23′ W. We had variable light airs next to a calm all this day, and the weather was fair and clear till towards the evening, when it became cloudy, with snow showers, and the air very cold. Ice-islands continually in sight; most of them small and breaking to pieces.

In the afternoon of the 13th the wind increased, the sky became clouded, and soon after we had a very

heavy fall of snow, which continued till eight or nine o'clock in the evening, when the wind abating and veering to S. E., the sky cleared up, and we had a fair night, attended with so sharp a frost, that the water in all our vessels on deck was next morning covered with a sheet of ice. The mercury in the thermometer was as low as 29°, which is 3° below freezing, or rather 4; for we generally found the water freeze when the mercury stood at 33°.

Towards noon on the 14th, the wind veering to the south, increased to a very strong gale, and blew in heavy squalls, attended with snow. At intervals, between the squalls, the weather was fair and clear, but exceedingly cold. We continued to steer east, inclining a little to the north, and in the afternoon crossed the first meridian, or that of Greenwich, in the latitude of 57° 50′ S. At eight in the evening, we close-reefed the top-sails, took in the main-sail, and steered east, with a very hard gale at S. S. W., with a high sea from the same direction.

At day-break on the 15th, we set the main-sail, loosed a reef out of each top-sail, and with a very strong gale at S. W. and fair weather, steered E. N. E. till noon, at which time we were in the latitude of 56° 87′ S., longitude 4° 11′ east, when we pointed to the N. E., in order to get into the latitude of Cape Circumcision. Some large ice-islands were in sight, and the air was nearly as cold as on the preceding day. At eight o'clock in the evening, shortened sail, and at eleven hauled the wind to the N. W., not daring to stand on in the night, which was foggy, with snow-showers, and a smart frost.

At day-break on the 16th, we bore away N. E. with a light breeze at west, which, at noon, was succeeded by a calm and fair weather. Our latitude at this time was 55° 26′ S., longitude 5° 52′ east, in which situation we had a great swell from the southward, but no ice in sight. At one o'clock in the P. M., a breeze springing up at E. N. E., we stood to S. E. till

six, then tacked, and stood to the north, under double-reefed top-sails and courses, having a very fresh gale, attended with snow and sleet, which fixed to the masts and rigging as it fell, and coated the whole with ice.

On the 17th the wind continued veering by little and little to the south, till midnight, when it fixed at S. W. Being at this time in the latitude of 54° 20′ S., longitude 6° 33′ east, I steered east, having a prodigious high sea from the south, which assured us no land was near in that direction.

In the morning of the 18th it ceased to snow; the weather became fair and clear; and we found the variation to be 13° 44′ west. At noon we were in the latitude of 54° 25′, longitude 8° 46′ east. I thought this a good latitude to keep in, to look for Cape Circumcision; because, if the land had ever so little extent in the direction of north and south, we could not miss seeing it, as the northern point is said to lie in 54°. We had yet a great swell from the south, so that I was now well assured it could only be an island; and it was of no consequence which side we fell in with. In the evening Mr. Wales made several observations of the moon, and stars Regulus and Spica; the mean results, at four o'clock, when the observations were made, for finding the time by the watch, gave 9° 15′ 20″ east longitude. The watch at the same time gave 9° 36′ 45″. Soon after the variation was found to be 13° 10′ west. It is nearly in this situation that Mr. Bouvet had 1° east. I cannot suppose that the variation has altered so much since that time; but rather think he had made some mistake in his observations. That there could be none in ours was certain, from the uniformity for some time past. Besides, we found 12° 8′ west, variation, nearly under this meridian, in January, 1773. During the night the wind veered round by the N. W. to N. N. E., and blew a fresh gale.

At eight in the morning of the 19th, we saw the

appearance of land in the direction of E. by S. or that of our course; but it proved a mere fog-bank, and soon after dispersed. We continued to steer E. by S. and S. E. till seven o'clock in the evening, when, being in the latitude of 54° 42′ S., longitude 13° 3′ E., and the wind having veered to N. E., we tacked and stood to N. W. under close-reefed top-sails and courses; having a very strong gale, attended with snow showers.

At four o'clock next morning, being in the latitude of 54° 30′ S., longitude 12° 33′ E., we tacked, and stretched to N. E., with a fresh gale at S. W., attended with snow-showers and sleet. At noon, being in the latitude of 54° 8′ S., longitude 12° 59′ E., with a fresh gale at W. by N. and tolerably clear weather, we steered E. till ten o'clock in the evening, when we brought to, lest we might pass any land in the night, of which we however had not the least signs.

At day-break, having made sail, we bore away east, and at noon observed in latitude 54° 16′ S., longitude 16° 13′ E., which is 5° to the east of the longitude in which Cape Circumcision is said to lie; so that we began to think there was no such land in existence. I however continued to steer east, inclining a little to the south, till four o'clock in the afternoon of the next day, when we were in latitude of 54° 24′ S., longitude 19° 18′ E.

We had now run down thirteen degrees of longitude, in the very latitude assigned for Bouvet's Land; I was therefore well assured that what he had seen could be nothing but an island of ice; for, if it had been land, it is hardly possible we could have missed it, though it were ever so small. Besides, from the time of leaving the southern lands, we had not met with the least signs of any other. But even suppose we had, it would have been no proof of the existence of Cape Circumcision; for I am well assured that neither seals, nor penguins, nor any of the oceanic birds, are indubitable signs of the vicinity of land. I

will allow that they are found on the coasts of all these southern lands; but are they not also to be found in all parts of the southern ocean? There are, however, some oceanic or aquatic birds which point out the vicinity of land; especially shags, which seldom go out of sight of it; and gannets, boobies, and men of war birds, I believe, seldom go very far out to sea.

As we were now no more than two degrees of longitude from our route to the south, when we left the Cape of Good Hope, it was to no purpose to proceed any further to the east under this parallel, knowing that no land could be there. But an opportunity now offering of clearing up some doubts of our having seen land farther to the south, I steered S. E. to get into the situation in which it was supposed to lie.

We continued this course till four o'clock the next morning, and then S. E. by E. and E. S. E. till eight in the evening, at which time we were in the latitude of 55° 25′ S., longitude 28° 22′ E., both deduced from observations made the same day; for, in the morning, the sky was clear at intervals, and afforded an opportunity to observe several distances of the sun and moon, which we had not been able to do for some time past, having had a constant succession of bad weather.

Having now run over the place where the land was supposed to lie, without seeing the least signs of any, it was no longer to be doubted but that the ice-islands had deceived us as well as Mr. Bouvet. The wind by this time having veered to the north, and increased to a perfect storm, attended as usual with snow and sleet, we handed the top-sails, and hauled up E. N. E. under the courses. During the night the wind abated, and veered to N. W., which enabled us to steer more to the north, having no business farther south.

CHAP. VII.

HEADS OF WHAT HAS BEEN DONE IN THE VOYAGE; WITH SOME CONJECTURES CONCERNING THE FORMATION OF ICE-ISLANDS; AND AN ACCOUNT OF OUR PROCEEDINGS TILL OUR ARRIVAL AT THE CAPE OF GOOD HOPE.

I HAD now made the circuit of the Southern Ocean in a high latitude, and traversed it in such a manner as to leave not the least room for the possibility of there being a continent, unless near the pole, and out of the reach of navigation. By twice visiting the tropical sea, I had not only settled the situation of some old discoveries, but made there many new ones, and left, I conceive, very little more to be done even in that part. Thus I flatter myself, that the intention of the voyage has, in every respect, been fully answered; the southern hemisphere sufficiently explored; and a final end put to the searching after a southern continent, which has, at times, ingrossed the attention of some of the maritime powers for near two centuries past, and been a favourite theory amongst the geographers of all ages.

That there may be a continent, or large tract of land, near the pole, I will not deny; on the contrary, I am of opinion there is; and it is probable that we have seen a part of it. The excessive cold, the many islands and vast floats of ice, all tend to prove that there must be land to the south; and for my persuasion that this southern land must lie, or extend, farthest to the north, opposite to the Southern Atlantic and Indian Oceans, I have already assigned some reasons; to which I may add the greater degree of cold experienced by us in these seas, than in the Southern Pacific Ocean under the same parallels of latitude.

In this last ocean, the mercury in the thermometer seldom fell so low as the freezing point, till we were

in 60° and upwards; whereas in the others it fell as low in the latitude of 54°. This was certainly owing to there being a greater quantity of ice, and to its extending farther to the north, in these two seas than in the South Pacific; and if ice be first formed at, or near land, of which I have no doubt, it will follow that the land also extends farther north.

The formation or coagulation of ice-islands, has not, to my knowledge, been thoroughly investigated. Some have supposed them to be formed by the freezing of the water at the mouths of large rivers, or great cataracts, where they accumulate till they are broken off by their own weight. My observations will not allow me to acquiesce in this opinion; because we never found any of the ice which we took up incorporated with earth, or any of its produce, as I think it must have been, had it been coagulated in land waters. It is a doubt with me, whether there be any rivers in these countries. It is certain, that we saw not a river, or stream of water, on all the coast of Georgia, nor on any of the southern lands. Nor did we ever see a stream of water run from any of the ice-islands. How are we then to suppose that there are large rivers? The valleys are covered, many fathoms deep, with everlasting snow; and, at the sea, they terminate in icy cliffs of vast height. It is here where the ice-islands are formed; not from streams of water, but from consolidated snow and sleet, which is almost continually falling or drifting down from the mountains, especially in the winter, when the frost must be intense. During that season, the ice-cliffs must so accumulate as to fill up all the bays, be they ever so large. This is a fact which cannot be doubted, as we have seen it so in summer. These cliffs accumulate by continual falls of snow, and what drifts from the mountains, till they are no longer able to support their own weight; and then large pieces break off, which we call ice-islands. Such as have a flat even surface, must be of the ice

formed in the bays, and before the flat valleys; the others, which have a tapering unequal surface, must be formed on, or under, the side of a coast composed of pointed rocks and precipices, or some such uneven surface. For we cannot suppose that snow alone, as it falls, can form, on a plain surface, such as the sea, such a variety of high peaks and hills as we saw on many of the ice isles. It is certainly more reasonable to believe that they are formed on a coast whose surface is something similar to theirs. I have observed that all the ice-islands of any extent, and before they begin to break to pieces, are terminated by perpendicular cliffs of clear ice or frozen snow, always on one or more sides, but most generally all round. Many, and those of the largest size, which had a hilly and spiral surface, showed a perpendicular cliff or side from the summit of the highest peak down to its base. This to me was a convincing proof, that these, as well as the flat isles, must have broken off from substances like themselves, that is, from some large tract of ice.

When I consider the vast quantity of ice we saw, and the vicinity of the places to the pole where it is formed, and where the degrees of longitude are very small, I am led to believe that these ice-cliffs extend a good way into the sea, in some parts, especially in such as are sheltered from the violence of the winds. It may even be doubted if ever the wind is violent in the very high latitudes. And that the sea will freeze over, or the snow that falls upon it, which amounts to the same thing, we have instances in the northern hemisphere. The Baltic, the Gulph of St. Laurence, the Straits of Belle-Isle, and many other equally large seas, are frequently frozen over in winter. Nor is this at all extraordinary, for we have found the degree of cold at the surface of the sea, even in summer, to be two degrees below the freezing point; consequently nothing kept it from freezing but the salts it contains, and the agitation of its

surface. Whenever this last ceaseth in winter, when the frost is set in, and there comes a fall of snow, it will freeze on the surface as it falls, and in a few days, or perhaps in one night, form such a sheet of ice as will not be easily broken up. Thus a foundation will be laid for it to accumulate to any thickness by falls of snow, without its being at all necessary for the sea water to freeze. It may be by this means these vast floats of low ice we find in the spring of the year are formed, and which, after they break up, are carried by the currents to the north. For, from all the observations I have been able to make, the currents every where, in the high latitudes, set to the N., or to the N.E. or N.W.; but we have very seldom found them considerable.

If this imperfect account of the formation of these extraordinary floating islands of ice, which is written wholly from my own observations, does not convey some useful hints to an abler pen, it will, however, convey some idea of the lands where they are formed. Lands doomed by nature to perpetual frigidness; never to feel the warmth of the sun's rays; whose horrible and savage aspect I have not words to describe. Such are the lands we have discovered; what then may we expect those to be which lie still farther to the south? For we may reasonably suppose that we have seen the best, as lying most to the north. If any one should have resolution and perseverance to clear up this point by proceeding farther than I have done, I shall not envy him the honour of the discovery; but I will be bold to say, that the world will not be benefited by it.

I had, at this time, some thoughts of revisiting the place where the French discovery is said to lie. But then I considered that, if they had really made this discovery, the end would be as fully answered as if I had done it myself. We know it can only be an island; and if we may judge from the degree of cold we found in that latitude, it cannot be a fertile one.

Besides, this would have kept me two months longer at sea, and in a tempestuous latitude, which we were not in a condition to struggle with. Our sails and rigging were so much worn, that something was giving way every hour; and we had nothing left, either to repair or replace them. Our provisions were in a state of decay, and consequently afforded little nourishment, and we had been a long time without refreshments. My people, indeed, were yet healthy, and would have cheerfully have gone wherever I had thought proper to lead them; but I dreaded the scurvy laying hold of them, at a time when we had nothing left to remove it. I must say farther, that it would have been cruel in me to have continued the fatigues and hardships they were continually exposed to longer than was absolutely necessary. Their behaviour, throughout the whole voyage, merited every indulgence which it was in my power to give them. Animated by the conduct of the officers, they showed themselves capable of surmounting every difficulty and danger which came in their way, and never once looked either upon the one or the other, as being at all heightened by our separation from our consort the Adventure.

All these considerations induced me to lay aside looking for the French discoveries, and to steer for the Cape of Good Hope; with a resolution, however, of looking for the isles of Denia and Marseveen, which are laid down in Dr. Halley's variation chart in the latitude of 41½° S., and about 4° of longitude to the east of the meridian of the Cape of Good Hope. With this view I steered N.E., with a hard gale at N.W. and thick weather; and on the 26th at noon, we saw the last ice-island, being at this time in the latitude of 52° 52′ S., longitude 26° 31′ E.

The wind abating and veering to the S., on the 1st of March, we steered W., in order to get farther from Mr. Bouvet's track, which was but a few degrees to the east of us, being at this time in the latitude of

46° 44′ S., longitude 33° 20′ E., in which situation we found the variation to be 23° 36′ west. It is somewhat remarkable, that all the time we had northerly winds, which were regular and constant for several days, the weather was always thick and cloudy; but, as soon as they came S. of W. it cleared up, and was fine and pleasant. The barometer began to rise several days before this change happened; but whether on account of it, or our coming northward, cannot be determined.

The wind remained not long at south before it veered round by the N. E. to N. W., blowing fresh and by squalls, attended, as before, with rain and thick misty weather. We had some intervals of clear weather on the afternoon of the 3d, when we found the variation to be 22° 26′ W.; latitude at this time 45° 8′ S., longitude 30° 50′ E. The following night was very stormy; the wind blew from S. W. and in excessively heavy squalls. At short intervals between the squalls, the wind would fall almost to a calm, and then come on again with such fury, that neither our sails nor rigging could withstand it, several of the sails being split, and a middle stay-sail being wholly lost. The next morning the gale abated, and we repaired the damage we had sustained in the best manner we could.

On the 8th, being in the latitude of 41° 30′ S., longitude 26° 51′ E., the mercury in the thermometer rose to 61, and we found it necessary to put on lighter clothes. As the wind continued invariably fixed between N. W. and W., we took every advantage to get to the west, by tacking whenever it shifted any thing in our favour; but as we had a great swell against us, our tacks were rather disadvantageous. We daily saw albatrosses, peterels, and other oceanic birds; but not the least sign of land.

On the 11th, in the latitude of 40° 40′ S., longitude 23° 47′ E., the variation was 20° 48′ W. About noon the same day, the wind shifting suddenly from

N. W. to S. W. caused the mercury in the thermometer to fall as suddenly from 62° to 52°; such was the different state of the air, between a northerly and southerly wind. The next day, having several hours calm, we put a boat in the water, and shot some albatrosses and peterels; which, at this time, were highly acceptable. We were now nearly in the situation where the isles which we were in search of, are said to lie; however, we saw nothing that could give us the least hope of finding them.

The calm continued till five o'clock of the next morning, when it was succeeded by a breeze at W. by S., with which we stood to N. N. W. and at noon observed in latitude 38° 51′ S. This was upwards of thirty miles more to the north than our log gave us; and the watch shewed that we had been set to the east also. If these differences did not arise from some strong current, I know not how to account for them. Very strong currents have been found on the African coast, between Madagascar and the Cape of Good Hope; but I never heard of their extending so far from the land; nor is it probable they do. I rather suppose that this current has no connection with that on the coast; and that we happened to fall into some stream which is neither lasting nor regular. But these are points which require much time to investigate, and must therefore be left to the industry of future navigators.

We were now two degrees to the north of the parallel in which the isles of Denia and Marseveen are said to lie. We had seen nothing to encourage us to persevere in looking after them; and it must have taken up some time longer to find them, or to prove their non-existence. Every one was impatient to get into port, and for good reasons; as for a long time we had had nothing but stale and salt provisions, for which every one on board had lost all relish. These reasons induced me to yield to the general wish, and to steer for the Cape of Good Hope, being at this time in the latitude of 38° 38′ S., longitude 23° 37′ E.

The next day the observed latitude at noon was only seventeen miles to the north of that given by the log; so that we had either got out of the strength of the current, or it had ceased.

On the 15th the observed latitude at noon, together with the watch, shewed that we had had a strong current setting to the S. W. the contrary direction to what we had experienced on some of the preceding days, as hath been mentioned.

At day-light, on the 16th, we saw two sail in the N. W. quarter standing to the westward, and one of them shewing Dutch colours. At ten o'clock we tacked and stood to the west also, being at this time in the latitude of 35° 9′ S., longitude 22° 38′ E.

I now, in pursuance of my instructions, demanded of the officers and petty officers, the log-books and journals they had kept; which were delivered to me accordingly, and sealed up for the inspection of the Admiralty. I also enjoined them, and the whole crew, not to divulge where we had been, till they had their Lordships' permission so to do. In the afternoon the wind veered to the west, and increased to a hard gale, which was of short duration; for, the next day, it fell, and at noon veered to S. E. At this time we were in the latitude of 34° 49′ S., longitude 22° E.; and, on sounding, found fifty-six fathoms water. In the evening we saw the land in the direction of E. N. E., about six leagues distant; and, during the forepart of the night, there was a great fire or light upon it.

At day-break on the 18th, we saw the land again, bearing N. N. W., six or seven leagues distant, and the depth of water forty-eight fathoms. At nine o'clock, having little or no wind, we hoisted out a boat and sent on board one of the two ships before mentioned, which were about two leagues from us; but we were too impatient after news to regard the distance. Soon after, a breeze sprung up at west, with which we stood to the south; and, presently,

three sail more appeared in sight to windward, one of which shewed English colours.

At one P.M. the boat returned from on board the Bownkerke Polder, Captain Cornelius Bosch, a Dutch Indiaman from Bengal. Captain Bosch, very obligingly, offered us sugar, arrack, and whatever he had to spare. Our people were told by some English seamen on board this ship, that the Adventure had arrived at the Cape of Good Hope twelve months ago, and that the crew of one of her boats had been murdered and eaten by the people of New Zealand; so that the story which we heard in Queen Charlotte's Sound was now no longer a mystery.

We had light airs, next to a calm, till ten o'clock the next morning, when a breeze sprung up at west, and the English ship, which was to windward, bore down to us. She proved to be the True Briton, Captain Broadly, from China. As he did not intend to touch at the Cape, I put a letter on board him for the Secretary of the Admiralty.

The account which we had heard of the Adventure was now confirmed to us by this ship. We also got, from on board her, a parcel of old newspapers, which were new to us, and gave us some amusement; but these were the least favours we received from Captain Broadly. With a generosity peculiar to the commanders of the India Company's ships, he sent us fresh provisions, tea, and other articles, which were very acceptable; and deserve from me this public acknowledgment. In the afternoon we parted company. The True Briton stood out to sea, and we in for the land; having a fresh gale at west, which split our fore top-sail in such a manner, that we were obliged to bring another to the yard. At six o'clock we tacked within four or five miles of the shore; and, as we judged, about five or six leagues to the east of Cape Aguilas. We stood off till midnight, when, the wind having veered round to the south, we tacked, and stood along-shore to the west. The wind kept

veering more and more in our favour, and at last fixed at E. S. E., and blew, for some hours, a perfect hurricane.

As soon as the storm began to subside we made sail, and hauled in for the land. Next day at noon, the Table Mountain over the Cape Town bore N. E. by E., distant nine or ten leagues. By making use of this bearing and distance to reduce the longitude shewn by the watch to the Cape Town, the error was found to be no more than 18′ in longitude, which it was too far to the east. Indeed, the difference we found between it and the lunar observations, since we left New Zealand, had seldom exceeded half a degree, and always the same way.

The next morning, being with us Wednesday, the 22d, but with the people here Tuesday, the 21st, we anchored in Table Bay, where we found several Dutch ships; some French; and the Ceres, Captain Newte, an English East India Company's ship, from China, bound directly to England, by whom I sent a copy of the preceding parts of this journal, some charts, and other drawings, to the Admiralty.

Before we had well got to an anchor, I dispatched an officer to acquaint the governor with our arrival, and to request the necessary stores and refreshments, which were readily granted. As soon as the officer came back, we saluted the garrison with thirteen guns, which compliment was immediately returned with an equal number.

I now learnt that the Adventure had called here, on her return; and I found a letter from Captain Furneaux, acquainting me with the loss of his boat, and of ten of his best men, in Queen Charlotte's Sound. The captain, afterwards, on my arrival in England, put into my hands a complete narrative of his proceedings, from the time of our second and final separation, which I now lay before the public in the following chapter.

CHAP. VIII.

CAPTAIN FURNEAUX'S NARRATIVE OF HIS PROCEEDINGS, IN THE ADVENTURE, FROM THE TIME HE WAS SEPARATED FROM THE RESOLUTION, TO HIS ARRIVAL IN ENGLAND; INCLUDING LIEUTENANT BURNEY'S REPORT CONCERNING THE BOAT'S CREW, WHO WERE MURDERED BY THE INHABITANTS OF QUEEN CHARLOTTE'S SOUND.

AFTER a passage of fourteen days from Amsterdam, we made the coast of New Zealand near the Table Cape, and stood along-shore till we came as far as Cape Turnagain. The wind then began to blow strong at west, with heavy squalls and rain, which split many of our sails, and blew us off the coast for three days; in which time we parted company with the Resolution, and never saw her afterwards.

On the 4th of November, we again got in shore, near Cape Palliser, and were visited by a number of the natives in their canoes, bringing a great quantity of cray-fish, which we bought of them for nails and Otaheite cloth. The next day it blew hard from W. N. W., which again drove us off the coast, and obliged us to bring to for two days; during which time it blew one continual gale of wind with heavy falls of sleet. By this time our decks were very leaky; our beds and bedding wet; and several of our people complaining of colds; so that we began to despair of ever getting into Charlotte Sound, or joining the Resolution.

On the 6th, being to the north of the Cape, the wind at S. W. and blowing strong, we bore away for some bay to complete our water and wood, being in great want of both; having been at the allowance of one quart of water for some days past; and even that pittance could not be come at, above six or seven days longer. We anchored in Tolaga Bay on the 9th, in latitude 38° 21′ S., longitude 178° 37′ E.

It affords good riding with the wind westerly, and regular soundings from eleven to five fathoms, stiff muddy ground across the bay for about two miles. It is open from N. N. E. to E. S. E. It is to be observed, easterly winds seldom blow hard on this shore, but when they do, they throw in a great sea; so that if it were not for a great undertow, together with a large river that empties itself in the bottom of the bay, a ship would not be able to ride here. Wood and water are easily to be had, except when it blows hard easterly. The natives here are the same as those at Charlotte Sound, but more numerous, and seemed settled, having regular plantations of sweet potatoes, and other roots, which are very good; and they have plenty of cray and other fish, which we bought of them for nails, beads, and other trifles, at an easy rate. In one of their canoes we observed the head of a woman lying in state, adorned with feathers and other ornaments. It had the appearance of being alive; but, on examination, we found it dry, being preserved with every feature perfect, and kept as the relic of some deceased relation.

Having got about ten tons of water, and some wood, we sailed for Charlotte Sound on the 12th. We were no sooner out than the wind began to blow hard, dead on the shore, so that we could not clear the land on either tack. This obliged us to bear away again for the bay, where we anchored the next morning, and rode out a very heavy gale of wind at E. by S. which threw in a very great sea. We now began to fear we should never join the Resolution; having reason to believe she was in Charlotte Sound, and by this time ready for sea. We soon found it was with great difficulty we could get any water, owing to the swell setting in so strong; at last, however, we were able to go on shore, and got both wood and water.

Whilst we lay here, we were employed about the rigging, which was much damaged by the constant

gales of wind we had met with since we made the coast. We got the booms down on the decks, and having made the ship as snug as possible, sailed again on the 16th. After this we met with several gales of wind off the mouth of the Strait; and continued beating backwards and forwards till the 30th, when we were so fortunate as to get a favourable wind, which we took every advantage of, and at last got safe into our desired port. We saw nothing of the Resolution, and began to doubt her safety; but on going ashore, we discerned the place where she had erected her tents; and, on an old stump of a tree in the garden, observed these words cut out, "Look underneath." There we dug, and soon found a bottle corked and waxed down, with a letter in it from Captain Cook, signifying their arrival on the 3d instant, and departure on the 24th; and that they intended spending a few days in the entrance of the Straits to look for us.

We immediately set about getting the ship ready for sea as fast as possible; erected our tents; sent the cooper on shore to repair the casks; and began to unstow the hold, to get at the bread that was in butts; but on opening them found a great quantity of it entirely spoiled, and most part so damaged that we were obliged to fix our copper oven on shore to bake it over again, which undoubtedly delayed us a considerable time. Whilst we lay here, the inhabitants came on board as before, supplying us with fish, and other things of their own manufacture, which we bought of them for nails, &c. and appeared very friendly; though twice in the middle of the night, they came to the tent, with an intention to steal, but were discovered before they could get any thing into their possession.

On the 17th of December, having refitted the ship, completed our water and wood, and got every thing ready for sea, we sent our large cutter, with Mr. Rowe, a midshipman, and the boat's crew, to gather

wild greens for the ship's company; with orders to return that evening, as I intended to sail the next morning. But, on the boat's not returning the same evening, nor the next morning, being under great uneasiness about her, I hoisted out the launch, and sent her, with the second lieutenant, Mr. Burney, manned with the boat's crew and ten marines, in search of her. My orders to Mr. Burney were, first to look well into East Bay, and then to proceed to Grass Cove, the place to which Mr. Rowe had been sent; and if he heard nothing of the boat there, to go farther up the Sound, and come back along the west shore. As Mr. Rowe had left the ship an hour before the time proposed, and in a great hurry, I was strongly persuaded that his curiosity had carried him into East Bay, none in our ship having ever been there; or else, that some accident had happened to the boat, either by going a-drift through the boat-keeper's negligence, or by being stove among the rocks. This was almost every body's opinion; and on this supposition the carpenter's mate was sent in the launch, with some sheets of tin. I had not the least suspicion that our people had received any injury from the natives; our boats having frequently been higher up, and worse provided. How much I was mistaken, too soon appeared; for Mr. Burney having returned about eleven o'clock the same night, made his report of a horrible scene indeed, which cannot be better described than in his own words, which now follow.

"On the 18th we left the ship; and having a light breeze in our favour, we soon got round Long Island, and within Long Point. I examined every cove, on the larboard hand, as we went along, looking well all around with a spy-glass, which I took for that purpose. At half-past one, we stopped at a beach, on the left hand side going up East Bay, to boil some victuals, as we brought nothing but raw meat with us. Whilst we were cooking, I saw an

Indian on the opposite shore, running along a beach to the head of the bay. Our meat being drest, we got into the boat and put off; and, in a short time, arrived at the head of this reach, where we saw an Indian settlement.

"As we drew near, some of the Indians came down on the rocks, and waved for us to be gone; but seeing we disregarded them, they altered their notes. Here we found six large canoes hauled up on the beach, most of them double ones, and a great many people; though not so many as one might expect from the number of houses and size of the canoes. Leaving the boat's crew to guard the boat, I stepped a-shore with the marines (the corporal and five men), and searched a good many of their houses; but found nothing to give me any suspicion. Three or four well-beaten paths led farther into the woods, where were many more houses; but the people continuing friendly, I thought it unnecessary to continue our search. Coming down to the beach, one of the Indians had brought a bundle of *Hepatoos* (long spears), but seeing I looked very earnestly at him, he put them on the ground, and walked about with seeming unconcern. Some of the people appearing to be frightened, I gave a looking-glass to one, and a large nail to another. From this place the bay ran, as nearly as I could guess, N. N. W. a good mile, where it ended in a long sandy beach. I looked all round with the glass, but saw no boat, canoe, or sign of inhabitant. I therefore contented myself with firing some guns, which I had done in every cove as I went along.

"I now kept close to the east shore, and came to another settlement, where the Indians invited us ashore. I inquired of them about the boat, but they pretended ignorance. They appeared very friendly here, and sold us some fish. Within an hour after we left this place, in a small beach adjoining to Grass Cove, we saw a very large double canoe just hauled

up, with two men and a dog. The men, on seeing us, left their canoe, and ran up into the woods. This gave me reason to suspect I should here get tidings of the cutter. We went ashore, and searched the canoe, where we found one of the rullock-ports of the cutter, and some shoes, one of which was known to belong to Mr. Woodhouse, one of our midshipmen. One of the people, at the same time, brought me a piece of meat, which he took to be some of the salt meat belonging to the cutter's crew. On examining this, and smelling to it, I found it was fresh. Mr. Fannin (the master) who was with me, supposed it was dog's flesh, and I was of the same opinion; for I still doubted their being cannibals. But we were soon convinced by most horrid and undeniable proof.

"A great many baskets (about twenty) lying on the beach tied up, we cut them open. Some were full of roasted flesh, and some of fern-root, which serves them for bread. On farther search, we found more shoes and a hand, which we immediately knew to have belonged to Thomas Hill, one of our fore-castle men, it being marked T. H. with an Otaheite tattow-instrument. I went with some of the people a little way up the woods, but saw nothing else. Coming down again, there was a round spot covered with fresh earth about four feet diameter, where something had been buried. Having no spade, we began to dig with a cutlass; and in the mean time I launched the canoe with intent to destroy her; but seeing a great smoke ascending over the nearest hill, I got all the people into the boat, and made what haste I could to be with them before sun-set.

"On opening the next bay, which was Grass Cove, we saw four canoes, one single and three double ones, and a great many people on the beach, who, on our approach, retreated to a small hill within a ship's length of the water-side, where they stood talking to us. A large fire was on the top of the high land beyond the woods, from whence, all the way down the

hill the place was thronged like a fair. As we came in, I ordered a musquetoon to be fired at one of the canoes, suspecting they might be full of men lying down in the bottom; for they were all afloat, but nobody was seen in them. The savages on the little hill still kept hallooing and making signs for us to land. However, as soon as we got close in, we all fired. The first volley did not seem to affect them much; but on the second, they began to scramble away as fast as they could, some of them howling. We continued firing as long as we could see the glimpse of any of them through the bushes. Amongst the Indians were two very stout men, who never offered to move till they found themselves forsaken by their companions; and then they marched away with great composure and deliberation; their pride not suffering them to run. One of them however, got a fall, and either lay there or crawled off on all fours. The other got clear without any apparent hurt. I then landed with the marines, and Mr. Fannin stayed to guard the boat.

"On the beach were two bundles of celery, which had been gathered for loading the cutter. A broken oar was stuck upright in the ground, to which the natives had tied their canoes; a proof that the attack had been made here. I then searched all along at the back of the beach, to see if the cutter was there. We found no boat, but instead of her, such a shocking scene of carnage and barbarity as can never be mentioned or thought of but with horror; for the heads, hearts, and lungs of several of our people were seen lying on the beach, and, at a little distance, the dogs gnawing their entrails.

"Whilst we remained almost stupified on the spot, Mr. Fannin called to us that he heard the savages gathering together in the woods; on which I returned to the boat, and hauling alongside the canoes, we demolished three of them. Whilst this was transacting, the fire on the top of the hill disappeared; and we could

hear the Indians in the woods at high words, I suppose quarrelling whether or no they should attack us, and try to save their canoes. It now grew dark, I therefore just stepped out, and looked once more behind the beach to see if the cutter had been hauled up in the bushes; but seeing nothing of her, returned and put off. Our whole force would have been barely sufficient to have gone up the hill, and to have ventured with half (for half must have been left to guard the boat) would have been fool-hardiness.

"As we opened the upper part of the sound, we saw a very large fire about three or four miles higher up, which formed a complete oval, reaching from the top of a hill down almost to the water-side, the middle space being inclosed all round by the fire, like a hedge. I consulted with Mr. Fannin, and we were both of opinion that we could expect to reap no other advantage than the poor satisfaction of killing some more of the savages. At leaving Grass Cove, we had fired a general volley towards where we heard the Indians talking; but, by going in and out of the boat, the arms had got wet, and four pieces missed fire. What was still worse, it began to rain; our ammunition was more than half expended, and we left six large canoes behind us in one place. With so many disadvantages, I did not think it worth while to to proceed, where nothing could be hoped for but revenge.

"Coming between two round islands, situated to the southward of East Bay, we imagined we heard somebody calling, we lay on our oars and listened, but heard no more of it; we hallooed several times, but to little purpose; the poor souls were far enough out of hearing; and, indeed, I think it some comfort to reflect that, in all probability, every man of them must have been killed on the spot."

Thus far Mr. Burney's report; and, to complete the account of this tragical transaction, it may not be unnecessary to mention that the people in the cutter

were Mr. Rowe; Mr. Woodhouse; Francis Murphy, quarter-master; William Facey, Thomas Hill, Michael Bell, and Edward Jones, forecastle-men; John Cavenaugh and Thomas Milton, belonging to the after-guard; and James Sevilley, the captain's man, being ten in all. Most of these were of our very best seamen, the stoutest and most healthy people in the ship. Mr. Burney's party brought on board two hands, one belonging to Mr. Rowe, known by a hurt he had received on it; the other to Thomas Hill, as before-mentioned; and the head of the captain's servant. These, with more of the remains, were tied in a hammock and thrown over-board, with ballast and shot sufficient to sink it. None of their arms nor clothes were found, except part of a pair of trowsers, a frock, and six shoes, no two of them being fellows.

I am not inclined to think this was any premeditated plan of these savages; for, the morning Mr. Rowe left the ship, he met two canoes, which came down and stayed all the forenoon in Ship Cove. It might probably happen from some quarrel which was decided on the spot; or the fairness of the opportunity might tempt them, our people being so incautious, and thinking themselves too secure. Another thing which encouraged the New Zealanders, was, they were sensible that a gun was not infallible, that they sometimes missed, and that when discharged, they must be loaded before they could be used again, which time they knew how to take advantage of. After their success, I imagine there was a general meeting on the east side of the sound. The Indians of Shag Cove were there; this we knew by a cock which was in one of the canoes, and by a long single canoe, which some of our people had seen four days before in Shag Cove, where they had been with Mr. Rowe in the cutter.

We were detained in the sound by contrary winds four days after this melancholy affair happened, dur-

ing which time we saw none of the inhabitants. What is very remarkable, I had been several times up in the same cove with Captain Cook, and never saw the least sign of an inhabitant, except some deserted towns, which appeared as if they had not been occupied for several years; and yet, when Mr. Burney entered the cove, he was of opinion there could not be less than fifteen hundred or two thousand people. I doubt not, had they been apprized of his coming, they would have attacked him. From these considerations I thought it imprudent to send a boat up again; as we were convinced there was not the least probability of any of our people being alive.

On the 23d, we weighed and made sail out of the Sound, and stood to the eastward to get clear of the Straits; which we accomplished the same evening, but were baffled for two or three days with light winds before we could clear the coast. We then stood to the S.S.E., till we got into the latitude of 56° S., without any thing remarkable happening, having a great swell from the southward. At this time the winds began to blow strong from the S.W., and the weather to be very cold; and as the ship was low and deep laden, the sea made a continual breach over her, which kept us always wet; and by her straining, very few of the people were dry in bed or on deck, having no shelter to keep the sea from them.

The birds were the only companions we had in this vast ocean; except now and then, we saw a whale or porpoise, and sometimes a seal or two, and a few penguins. In the latitude of 58° S., longitude 213°* E., we fell in with some ice, and every day saw more or less, we then standing to the E. We found a very strong current setting to the eastward; for by the time we were abreast of Cape Horn, being in the latitude of 61° S., the ship was a-head of our account eight degrees. We were very little more than a

* About 147 west longitude, as I reckon.

month from Cape Palliser in New Zealand to Cape Horn, which is an hundred and twenty-one degrees of longitude, and had continual westerly winds from S. W. to N. W., with a great sea following.

On opening some casks of peas and flour, that had been stowed on the coals, we found them very much damaged, and not eatable; so thought it most prudent to make for the Cape of Good Hope, but first to stand into the latitude and longitude of Cape Circumcision. After being to the eastward of Cape Horn, we found the winds did not blow so strong from the westward as usual, but came more from the north, which brought on thick foggy weather; so that for several days together we could not be able to get an observation, or see the least sign of the sun.

This weather lasted above a month, being then among a great many islands of ice, which kept us constantly on the look-out for fear of running foul of them, and, being a single ship, made us more attentive. By this time our people began to complain of colds and pains in their limbs, which obliged me to haul to the northward to the latitude of 54° S., but we still continued to have the same sort of weather, though we had oftener an opportunity of obtaining observations for the latitude.

After getting into the latitude abovementioned, I steered to the east, in order if possible to find the land laid down by Bouvet. As we advanced to the east, the islands of ice became more numerous and dangerous; they being much smaller than they used to be; and the nights began to be dark.

On the third of March, being then in the latitude of 54° 4′ S., longitude 13° E., which is the latitude of Bouvet's discovery, and half a degree to the eastward of it, and not seeing the least sign of land, either now or since we have been in this parallel, I gave over looking for it, and hauled away to the northward. As our last track to the southward was within a few degrees of Bouvet's discovery, in the

longitude assigned to it, and about three or four degrees to the southward, should there be any land thereabout, it must be a very inconsiderable island. But I believe it was nothing but ice; as we, in our first setting out, thought we had seen land several times, but it proved to be high islands of ice at the back of the large fields; and as it was thick foggy weather when Mr. Bouvet fell in with it, he might very easily mistake them for land.

On the 7th, being in the latitude of 48° 30′ S., longitude 14° 26′ E., saw two large islands of ice.

On the 17th, made the land of the Cape of Good Hope, and on the 19th anchored in Table Bay, where we found Commodore Sir Edward Hughes, with his Majesty's ships Salisbury and Sea-horse. I saluted the Commodore with thirteen guns; and soon after, the garrison with the same number; the former returned the salute, as usual, with two guns less, and the latter with an equal number.

On the 24th, Sir Edward Hughes sailed with the Salisbury and Sea-horse for the East Indies; but I remained refitting the ship and refreshing my people till the 16th of April, when I sailed for England and on the 14th of July anchored at Spithead.

CHAP. IX.

TRANSACTIONS AT THE CAPE OF GOOD HOPE; WITH AN ACCOUNT OF SOME DISCOVERIES MADE BY THE FRENCH; AND THE ARRIVAL OF THE SHIP AT ST. HELENA.

I NOW resume my own Journal, which Captain Furneaux's interesting Narrative in the preceding chapter, had obliged me to suspend.

The day after my arrival at the Cape of Good Hope, I went on shore and waited on the governor, Baron Plettenberg, and other principal officers, who received and treated us with the greatest politeness, contributing all in their power to make it agreeable. And, as there are few people more obliging to strangers than the Dutch in general at this place, and refreshments of all kinds are no where to be got in such abundance, we enjoyed some real repose, after the fatigues of a long voyage.

The good treatment which strangers meet with at the Cape of Good Hope, and the necessity of breathing a little fresh air, has introduced a custom not common any where else (at least I have no where seen it so strictly observed), which is, for all the officers who can be spared out of the ships to reside on shore. We followed this custom. Myself, the two Mr. Forsters, and Mr. Sparrman, took up our abode with Mr. Brandt, a gentleman well known to to the English by his obliging readiness to serve them. My first care after my arrival, was to procure fresh-baked bread, fresh meat, greens, and wine, for those who remained on board; and, being provided every day during our stay with these articles, they were soon restored to their usual strength. We had only three men on board whom it was thought necessary to send on shore for the recovery of their

health; and for these I procured quarters, at the rate of thirty stivers, or half a crown, per day, for which they were provided with victuals, drink, and lodging.

We now went to work to supply all our defects. For this purpose, by permission, we erected a tent on shore, to which we sent our casks and sails to be repaired. We also struck the yards and topmasts, in order to overhaul the rigging, which we found in so bad a condition, that almost every thing, except the standing rigging, was obliged to be replaced with new; and that was purchased at a most exorbitant price. In the article of naval stores, the Dutch here, as well as at Batavia, take a shameful advantage of the distress of foreigners.

That our rigging, sails, &c. should be worn out, will not be wondered at, when it is known, that, during this circumnavigation of the globe, that is, from our leaving this place, to our return to it again, we had sailed no less than twenty thousand leagues; an extent of voyage, nearly equal to three times the equatorial circumference of the earth, and which, I apprehend, was never sailed by any ship in the same space of time before. And yet, in all this great run, which had been made in all latitudes between 9° and 71°, we sprung neither low-masts, top-mast, lower nor top-sail yard, nor so much as broke a lower or top-mast shroud; which, with the great care and abilities of my officers, must be owing to the good properties of our ship.

One of the French ships which were at anchor in the bay, was the Ajax Indiaman, bound to Pondicherry, commanded by Captain Crozet. He had been second in command with Captain Morion, who sailed from this place with two ships, in March, 1772, as hath been already mentioned. Instead of going from hence to America, as was said, he stood away for New Zealand; where, in the Bay of Isles,

he and some of his people were killed by the inhabitants. Captain Crozet, who succeeded to the command, returned by the way of the Philippine Isles, with the two ships, to the Island of Mauritius. He seemed to be a man possessed of the true spirit of discovery, and to have abilities. In a very obliging manner, he communicated to me a chart, wherein were delineated not only his own discoveries, but also that of Captain Kerguelen, which I found laid down in the very situation where we searched for it; so that I can, by no means, conceive how both we and the Adventure missed it.

Besides this land, which Captain Crozet told us was a long but very narrow island, extending east and west, Captain Morion, in about the latitude of 48° S., and from 16° to 30° of longitude east of the Cape of Good Hope, discovered six islands which were high and barren. These, together with some islands lying between the line and the southern tropic in the Pacific Ocean, were the principal discoveries made in this voyage, the account of which, we were told, was ready for publication.

By Captain Crozet's chart it appeared that a voyage had been made by the French across the South Pacific Ocean, in 1769, under the command of one Captain Surville; who, on condition of his attempting discoveries, had obtained leave to make a trading voyage to the coast of Peru. He fitted out, and took in a cargo, in some part of the East Indies; proceeded by way of the Phillippine Isles; passed near New Britain; and discovered some land in the latitude of 10° S., longitude 158° E. to which he gave his own name. From hence he steered to the south; passed but a few degrees to the west of New Caledonia; fell in with New Zealand at its northern extremity, and put into Doubtful Bay, where it seems, he was, when I passed it, on my former voyage, in the Endeavour. From New Zealand, Captain Sur-

ville steered to the east, between the latitude of 35° and 41° south, until he arrived on the coast of America; where, in the port of Callao, in attempting to land, he was drowned.

These voyages of the French, though undertaken by private adventurers, have contributed something towards exploring the Southern Ocean. That of Captain Surville, clears up a mistake, which I was led into, in imagining the shoals off the west end of New Caledonia to extend to the west, as far as New Holland. It proves that there is an open sea in that space, and that we saw the N. W. extremity of that country.

From the same gentleman we learnt, that the ship which had been at Otaheite before our first arrival there this voyage, was from New Spain; and that, in her return, she had discovered some islands in the latitude of 32° S. and under the meridian of 130° W. Some other islands, said to be discovered by the Spaniards, appeared on this chart; but Captain Crozet seemed to think, they were inserted from no good authorities.

We were likewise informed of a later voyage undertaken by the French, under the command of Captain Kerguelen, which had ended much to the disgrace of that commander.

While we lay in Table Bay, several foreign ships put in and out, bound to and from India, viz. English, French, Danes, Swedes, and three Spanish frigates, two of them going to, and one coming from, Manilla. It is but very lately that the Spanish ships have touched here; and these were the first that were allowed the same privileges as other European friendly nations.

On examining our rudder, the pintles were found to be loose, and we were obliged to unhang it, and take it on shore to repair. We were also delayed for want of calkers to calk the ship, which was absolutely necessary to be done, before we put to sea. At length I obtained two workmen from one of the

Dutch ships; and the Dutton English East Indiaman, coming in from Bengal, Captain Rice, obliged me with two more; so that by the 26th of April, this work was finished; and having got on board all necessary stores, and a fresh supply of provisions and water, we took leave of the governor and other principal officers, and the next morning repaired on board. Soon after, the wind coming fair, we weighed and put to sea; as did also the Spanish frigate Juno, from Manilla, a Danish Indiaman, and the Dutton.

As soon as we were under sail, we saluted the garrison with thirteen guns; which compliment was immediately returned with the same number. The Spanish frigate and Danish Indiaman, both saluted us as we passed them, and I returned each salute with an equal number of guns. When we were clear of the bay, the Danish ship steered for the East Indies, the Spanish frigate for Europe, and we and the Dutton for St. Helena.

Depending on the goodness of Mr. Kendall's watch, I resolved to try to make the island, by a direct course. For the first six days, that is, till we got into the latitude of 27° S., longitude 11½° W. of the Cape, the winds were southerly and S. E. After this we had variable light airs for two days; they were succeeded by a wind at S. E. which continued to the island, except a part of one day, when it was at N. E. In general, the wind blew faint all the passage, which made it longer than common.

At day-break, in the morning of the 15th of May, we saw the island of St. Helena, at the distance of fourteen leagues; and, at midnight, anchored in the road before the town, on the N. W. side of the island. At sunrise the next morning, the castle, and also the Dutton, saluted us, each with thirteen guns; on my landing, soon after, I was saluted by the castle, with the same number; and each of the salutes was returned by the ship.

Governor Skettowe, and the principal gentlemen of the island, received and treated me, during my stay, with the greatest politeness, by showing me every kind of civility in their power.

Whoever views St. Helena, in its present state, and can but conceive what it must have been originally, will not hastily charge the inhabitants with want of industry. Though, perhaps, they might apply it to more advantage, were more land appropriated to planting of corn, vegetables, roots, &c. instead of being laid out in pasture, which is the present mode. But this is not likely to happen, so long as the greatest part of it remains in the hands of the Company and their servants. Without industrious planters this island can never flourish, and be in a condition to supply the shipping with the necessary refreshments.

Within these three years a new church has been built; some other new buildings were in hand; a commodious landing-place for boats has been made; and several other improvements, which add both strength and beauty to the place.

During our stay here we finished some necessary repairs of the ship, which we had not time to do at the Cape. We also filled all our empty water casks; and the crew were served with fresh beef, purchased at fivepence per pound. Their beef is exceedingly good, and is the only refreshment to be had worth mentioning.

By a series of observations made at the Cape Town, and at James Fort, in St. Helena; at the former by Messrs. Mason and Dixon, and at the latter by Mr. Maskelyne, the present astronomer royal, the difference of longitude between these two places is 24° 12′ 15″, only two miles more than Mr. Kendall's watch made. The lunar observations made by Mr. Wales, before we arrived at the island, and after we left it, and reduced to it by the watch, gave 5° 51′

for the longitude of James Fort; which is only five miles more west, than it is placed by Mr. Maskelyne. In like manner, the longitude of the Cape Town was found within 5′ of the truth. I mention this, to show how near the longitude of places may be found by the lunar method, even at sea, with the assistance of a good watch.

CHAP. X.

PASSAGE FROM ST. HELENA TO THE WESTERN ISLANDS, WITH A DESCRIPTION OF THE ISLAND OF ASCENSION AND FERNANDO NORONHO.

On the 21st, in the evening, I took leave of the governor, and repaired on board. Upon my leaving the shore, I was saluted with thirteen guns; and, upon my getting under sail, with the Dutton in company, I was saluted with thirteen more; both of which I returned.

After leaving St. Helena, the Dutton was ordered to steer N. W. by W. or N. W. by compass, in order to avoid falling in with Ascension; at which island, it was said, an illicit trade was carried on between the officers of the India Company's ships, and some vessels from North America, who, of late years, had frequented the island, on pretence of fishing for whales, or catching turtle, when their real design was to wait the coming of the India ships. In order to prevent their homeward bound ship from falling in with these smugglers, and to put a stop to this illicit trade, the Dutton was ordered to steer the course above-mentioned till to the northward of Ascension. I kept company with this ship till the 24th, when, after putting a packet on board her for the Admiralty, we parted; she continuing her course to the N. W. and I steering for Ascension.

In the morning of the 28th, I made the island, and the same evening anchored in Cross Bay on the N. W. side, in ten fathoms' water, the bottom a fine sand, and half a mile from the shore. The Cross Hill, so called on account of a cross, or flag-staff erected upon it, bore by compass S. 38° E.; and the two extreme points of the Bay extended from N. E. to S. W. We remained here till the evening

of the 31st; and, notwithstanding we had several parties out every night, we got but twenty-four turtle, it being rather too late in the season; however, as they weighed between four or five hundred pounds each, we thought ourselves not ill off. We might have had a plentiful supply of fish in general; especially of that sort called old wives, I have no where seen such abundance; there were also cavalies, congor eels, and various other sorts; but the catching of any of these was not attended to, the object being turtle. There are abundance of goats, and aquatic birds, such as men-of-war and tropic birds, boobies, &c.

The island of Ascension is about ten miles in length, in the direction of N. W. and S. E. and about five or six in breadth. It shews a surface composed of barren hills and valleys, on the most of which not a shrub or plant is to be seen for several miles, and where we found nothing but stones and sand, or rather slags and ashes; an indubitable sign that the isle, at some remote time, has been destroyed by a volcano, which has thrown up vast heaps of stones, and even hills. Between these heaps of stones we found a smooth even surface, composed of ashes and sand, and very good travelling upon it; but one may as easily walk over broken glass bottles as over the stones. If the foot deceives you, you are sure to be cut or lamed, which happened to some of our people. A high mountain, at the S. E. end of the isle, seems to be left in its original state, and to have escaped the general destruction. Its soil is a kind of white marl, which yet retains its vegetative qualities, and produceth a kind of purslain, spurg, and one or two grasses. On these the goats subsist; and it is at this part of the isle where they are to be found, as also land-crabs, which are said to be very good.

I was told, that about this part of the isle is some very good land, on which might be raised many necessary articles; and some have been at the trouble

of sowing turnips and other useful vegetables. I was also told there is a fine spring in a valley which disjoins two hills on the top of the mountain above mentioned; besides great quantities of fresh water in holes in the rocks, which the person who gave me this information believed was collected from rains. But these supplies of water can only be of use to the traveller; or to those who may be so unfortunate as to be shipwrecked on the island; which seems to have been the fate of some not long ago, as appeared by the remains of a wreck we found on the N. E. side. By what we could judge, she seemed to have been a vessel of about one hundred and fifty tons burthen.

While we lay in the road, a sloop of about seventy tons burthen came to an anchor by us. She belonged to New York, which place she left in February; and having been to the coast of Guinea with a cargo of goods, was come here to take in turtle to carry to Barbadoes. This was the story which the master, whose name was Greves, was pleased to tell, and which may, in part, be true. But I believe the chief view of his coming here, was the expectation of meeting with some of the India ships. He had been in the island near a week, and had got on board twenty turtle. A sloop, belonging to Bermuda, had sailed but a few days before with one hundred and five on board, which was as many as she could take in; but having turned several more on the different sandy beaches, they had ripped open their bellies, taken out the eggs, and left the carcasses to putrify; an act as inhuman as injurious to those who came after them. Part of the account I have given of the interior parts of this island I received from Captain Greves, who seemed to be a sensible intelligent man, and had been all over it. He sailed in the morning of the same day we did.

Turtle, I am told, are to be found at this isle from January to June. The method of catching them is to have people upon the several sandy bays, to watch

their coming on shore to lay their eggs, which is always in the night, and then to turn them on their backs, till there be an opportunity to take them off the next day. It was recommended to us to send a good many men to each beach, where they were to lie quiet till the turtle were ashore, and then rise and turn them at once. This method may be the best when the turtle are numerous; but when there are but few, three or four men are sufficient for the largest beach; and if they keep patroling it, close to the wash of the surf, during the night, by this method they will see all that come ashore, and cause less noise than if there were more of them. It was by this method we caught the most we got; and this is the method by which the Americans take them. Nothing is more certain than that all the turtle which are found about this island, come here for the sole purpose of laying their eggs; for we meet with none but females; and of all those which we caught, not one had any food worth mentioning in its stomach; a sure sign, in my opinion, that they must have been a long time without any; and this may be the reason why the flesh of them is not so good as some I have ate on the coast of New South Wales, which were caught on the spot where they fed.

The watch made 8° 45′ difference of longitude between St. Helena and Ascension; which added to 5° 49′, the longitude of James Fort in St. Helena, gives 14° 34′ for the longitude of the Road of Ascension, or 14° 30′ for the middle of the island, the latitude of which is 8° S. The lunar observations made by Mr. Wales, and reduced to the same point of the island by the watch, gave 14° 28′ 30″ west longitude.

On the 31st of May we left Ascension, and steered to the northward, with a fine gale at S. E. by E. I had a great desire to visit the island of St. Matthew, to settle its situation; but as I found the winds would not let me fetch it, I steered for the island of Fer-

nando de Noronho, on the coast of Brazil, in order to determine its longitude, as I could not find this had yet been done. Perhaps I should have performed a more acceptable service to navigation, if I had gone in search of the island of St. Paul, and those shoals which are said to lie near the equator, and about the meridian of 20° west; as neither their situation nor existence are well known. The truth is, I was unwilling to prolong the passage in searching for what I was not sure to find; nor was I willing to give up every object, which might tend to the improvement of navigation or geography, for the sake of getting home a week or a fortnight sooner. It is but seldom that opportunities of this kind offer; and when they do, they are too often neglected.

In our passage to Fernando de Noronho, we had steady fresh gales between the S. E. and E. S. E. attended with fair and clear weather; and as we had the advantage of the moon, a day or night did not pass without making lunar observations for the determining our longitude. In this run, the variation of the compass gradually decreased from 11° west, which it was at Ascension, to 1° west, which we found off Fernando de Noronho. This was the mean result of two compasses, one of which gave 1° 37′, and the other 23′ west.

On the 9th of June, at noon, we made the island of Fernando de Noronho, bearing S. W. by W. ½ W., distant six or seven leagues, as we afterwards found by the log. It appeared in detached and peaked hills, the largest of which looked like a church tower or steeple. As we drew near the S. E. part of the isle, we perceived several unconnected sunken rocks lying near a league from the shore, on which the sea broke in a great surf. After standing very near these rocks, we hoisted our colours, and then bore up round the north end of the isle, or rather round a group of little islets; for we could see that the land was divided by narrow channels. There is a strong fort on the one

next the main island, where there are several others; all of which seemed to have every advantage that nature can give them, and they are so disposed as wholly to command all the anchoring and landing-places about the island. We continued to steer round the northern point, till the sandy beaches (before which is the road for shipping) began to appear, and the forts and the peaked hills were open to the westward of the said point. At this time, on a gun being fired from one of the forts, the Portuguese colours were displayed, and the example was followed by all the other forts. As the purpose for which I made the island was now answered, I had no intention to anchor; and therefore, after firing a gun to leeward, we made sail and stood away to the northward, with a fine fresh gale at E. S. E. The peaked hill or church tower bore south, 27° west, distant about four or five miles; and from this point of view it leans, or over-hangs, to the east. This hill is nearly in the middle of the island, which no where exceeds two leagues in extent, and shows a hilly unequal surface, mostly covered with wood and herbage.

Ulloa says, "This island hath two harbours, capable of receiving ships of the greatest burden; one is on the north side, and the other on the N. W. The former is, in every respect, the principal, both for shelter and capacity, and the goodness of its bottom; but both are exposed to the north and west, though these winds, particularly the north, are periodical, and of no long continuance." He further says, that you anchor in the north harbour (which is no more than what I would call a road) in thirteen fathoms' water, one third of a league from shore, bottom of fine sand; the peaked hill above mentioned bearing S. W. 3° southerly.*

This road seems to be well sheltered from the south

* See Don Antonio d'Ulloa's Book, vol. ii. chap. 3. page 95 to 102, where there is a very particular account of this island

and east winds. One of my seamen had been on board a Dutch India ship, who put in at this isle in her way out, in 1770. They were very sickly, and in want of refreshments and water. The Portuguese supplied them with some buffaloes and fowls; and they watered behind one of the beaches in a little pool, which was hardly big enough to dip a bucket in. By reducing the observed latitude at noon to the peaked hill, its latitude will be 3° 53′ south; and its longitude, by the watch, carried on from St. Helena, is 32° 34′ west; and by observations of the sun and moon, made before and after we made the isle, and reduced to it by the watch, 32° 44′ 30″ west. This was the mean result of my observations. The results of those made by Mr. Wales, which were more numerous, gave 32° 23′. The mean of the two will be pretty near the watch, and probably nearest the truth. By knowing the longitude of this isle, we are able to determine that of the adjacent east coast of Brazil; which, according to the modern charts, lies about sixty or seventy leagues more to the west. We might very safely have trusted to these charts, especially the Variation Chart for 1744, and Mr. Dalrymple's of the Southern Atlantic Ocean.*

On the 11th, at three o'clock in the afternoon, we crossed the equator in the longitude of 32° 14′ west. We had fresh gales at S. S. E., blowing in squalls, attended by showers of rain, that continued at certain intervals, till noon the next day, after which we had twenty-four hours' fair weather.

At noon, on the 13th, being in the latitude of 3° 49′ north, longitude 31° 47′ west, the wind became variable, between the N. E. and south; and we had light airs and squalls by turns, attended by hard

* Ulloa says, that the chart places this island sixty leagues from the coast of Brazil; and that the Portuguese pilots, who often make the voyage, judge it to be eighty leagues; but, by taking the mean between the two opinions, the distance may be fixed at seventy leagues.

showers of rain, and for the most part dark gloomy weather, which continued till the evening of the 15th, when in the latitude of 5° 47′ north, longitude 31° west, we had three calm days, in which time we did not advance above ten or twelve leagues to the north. We had fair weather and rain by turns; the sky, for the most part, being obscured, and sometimes by heavy dense clouds which broke in excessive hard showers.

At seven o'clock in the evening on the 18th, the calm was succeeded by a breeze at east, which, the next day, increasing and veering to and fixing at N. E., we stretched to N. W. with our tacks on board. We made no doubt that we had now got the N.E. trade wind, at it was attended with fair weather, except now and then some light showers of rain; and, as we advanced to the north, the wind increased and blew a fresh top-gallant gale.

On the 21st, I ordered the still to be fitted to the largest copper, which held about sixty-four gallons. The fire was lighted at four o'clock in the morning, and at six the still began to run. It was continued till six o'clock in the evening; in which time we obtained thirty-two gallons of fresh water, at the expence of one bushel and a half of coals; which was about three-fourths of a bushel more than was necessary to have boiled the ship's company's victuals only; but the expence of fuel was no object with me. The victuals were dressed in the small copper, the other being applied wholly to the still; and every method was made use of to obtain from it the greatest quantity of fresh water possible, as this was my sole motive for setting it to work. The mercury in the thermometer at noon was at eighty-four and a half, and higher it is seldom found at sea. Had it been lower, more water, under the same circumstances, would undoubtedly have been produced; for the colder the air is, the cooler you can keep the still, which will condense the steam the faster. Upon the whole, this

is an useful invention; but I would advise no man to trust wholly to it. For although you may, provided you have plenty of fuel and good coppers, obtain as much water as will support life, you cannot, with all your efforts, obtain sufficient to support health, in hot climates especially, where it is the most wanting; for I am well convinced, that nothing contributes more to the health of seamen, than having plenty of water.

The wind now remained invariably fixed at N. E. and E. N. E. and blew fresh with squalls, attended with showers of rain, and the sky for the most part cloudy. On the 25th, in the latitude of 16° 12′ north, longitude 37° 20′ west, seeing a ship to windward steering down upon us, we shortened sail in order to speak with her; but finding she was Dutch by her colours, we made sail again and left her to pursue her course, which we supposed was to some of the Dutch settlements in the West Indies. In the latitude of 20° north, longitude 39° 45′ west, the wind began to veer to E. by N. and E.; but the weather remained the same; that is, we continued to have it clear and cloudy by turns, with light squalls and showers. Our track was between N. W. by N. and N. N. W. till noon on the 28th, after which our course made good was N. by W., being at this time in the latitude of 21° 21′ north, longitude 40° 6′ west. Afterwards, the wind began to blow a little more steady, and was attended with fair and clear weather. At two o'clock in the morning of the 30th, being in the latitude of 24° 20′ north, longitude 40° 47′ west, a ship, steering to the westward, passed us within hale. We judged her to be English, as they answered us in that language; but we could not understand what they said, and they were presently out of sight.

In the latitude of 29° 30′, longitude 41° 30′, the wind slackened and veered more to the S. E. We now began to see some of that sea-plant, which is

commonly called gulph-weed, from a supposition that it comes from the Gulph of Florida. Indeed, for aught I know to the contrary, it may be a fact; but it seems not necessary, as it is certainly a plant which vegetates at sea. We continued to see it, but always in small pieces, till we reached the latitude 36°, longitude 39° west, beyond which situation no more appeared.

On the 5th of July, in the latitude of 32° 31′ 30″ north, longitude 40° 29′ west, the wind veered to the east, and blew very faint; the next day it was calm; the two following days we had variable light airs and calms by turns; and, at length, on the 9th, having fixed at S. S. W., it increased to a fresh gale, with which we steered first N. E. and then E. N. E. with a view of making some of the Azores, or Western Isles. On the 11th, in the latitude of 36° 45′ north, longitude 36° 45′ west, we saw a sail which was steering to the west; and the next day we saw three more.

CHAP. XI.

ARRIVAL OF THE SHIP AT THE ISLAND OF FAYAL, A DESCRIPTION OF THE PLACE, AND THE RETURN OF THE RESOLUTION TO ENGLAND.

At five o'clock in the evening of the 13th, we made the island of Fayal, one of the Azores, and soon after that of Pico, under which we spent the night making short boards. At day break, the next morning, we bore away for the bay of Fayal, or De Horta, where, at eight o'clock, we anchored in twenty fathoms water, a clean sandy bottom, and something more than half a mile from the shore. Here we moored N. E. and S. W., being directed so to do by the master of the port, who came on board before we dropped anchor. When moored, the S. W. point of the bay bore S. 16° W., and the N. E. point N. 33° E.; the church at the N. E. end of the town N. 38° W.; the west point of St. George's Island N. 42° E., distant eight leagues; and the Isle of Pico extending from N. 74° E. to S. 46° E. distance four or five miles.

We found in the bay, the Pourvoyeur, a large French frigate, an American sloop, and a brig belonging to the place. She had come last from the river Amazon, where she took in a cargo of provisions for the Cape Verde Islands; but, not being able to find them, she steered for this place, were she anchored about half an hour before us.

As my sole design in stopping here was to give Mr. Wales an opportunity to find the rate of the watch, the better to enable us to fix, with some degree of certainty, the longitude of these islands, the moment we anchored, I sent an officer to wait on the English consul, and to notify our arrival to the Governor, requesting his permission for Mr. Wales to make observations on shore, for the purpose above-

mentioned. Mr. Dent, who acted as consul, in the absence of Mr. Gathorne, not only procured this permission, but accommodated Mr. Wales with a convenient place in his garden, to set up his instruments; so that he was enabled to observe equal altitudes the same day.

We were not more obliged to Mr. Dent for the very friendly readiness he showed, in procuring us this and every other thing we wanted, than for the very liberal and hospitable entertainment we met with at his house, which was open to accommodate us, both night and day.

During our stay, the ship's company was served with fresh beef; and we took on board about fifteen tons of water, which we brought off in the country boats, at the rate of about three shillings per ton. Ships are allowed to water with their own boats, but the many inconveniences attending it more than overbalance the expense of hiring shore-boats which is the most general custom.

Fresh provisions for present use may be got, such as beef, vegetables, and fruit; and hogs, sheep, and poultry, for sea-stock, at a pretty reasonable price; but I do not know that any sea-provisions are to be had, except wine. The bullocks and hogs are very good, but the sheep are small, and wretchedly poor.

The principal produce of Fayal is wheat and Indian corn, with which they supply Pico, and some of the other isles. The chief town is called Villa de Horta. It is situated in the bottom of the bay, close to the edge of the sea, and is defended by two castles, one at each end of the town, and a wall of stone-work, extending along the sea-shore, from the one to the other. But these works are suffered to go to decay, and serve more for show than strength. They heighten the prospect of the city, which makes a fine appearance from the road; but, if we except the Jesuits' College, the monasteries and churches, there is not another building that has any thing to recommend it,

either outside or in. There is not a glass window in the place, except what are in the churches, and in a country-house, which lately belonged to the English consul; all the others being latticed, which, to an Englishman, makes them look like prisons.

This little city, like all others belonging to the Portuguese, is crowded with religious buildings; there being no less than three convents of men, and two of women; and eight churches, including those belonging to the convents, and the one in the Jesuits' college. The college is a fine structure, and is seated on an elevation in the pleasantest part of the city. Since the expulsion of that order, it has been suffered to go to decay, and will probably, in a few years, be no better than a heap of ruins.

Fayal, although the most noted for wine, does not raise sufficient for its own consumption. This article is raised on Pico, where there is no road for shipping; but being brought to De Horta, and from thence shipped abroad, chiefly to America, it has acquired the name of Fayal wine.

The bay, or road of Fayal, is situated at the east end of the isle, before the Villa de Horta, and facing the west end of Pico. It is two miles broad, and three quarters of a mile deep, and hath a semi-circular form. The depth of water is from twenty to ten, and even six fathoms, a sandy bottom; except near the shore, and particularly near the S. W. head, off which the bottom is rocky, also without the line, which joins the two points of the bay, so that it is not safe to anchor far out. The bearing before mentioned, taken when at anchor, will direct any one to the best ground. It is by no means a bad road, but the winds most to be apprehended, are those which blow from between the S. S.W. and S. E.; the former is not so dangerous as the latter, because, with it, you can always get to sea. Besides this road, there is a small cove round the S. W. point, called Porto Piere, in which, I am told, a ship or two may lie in tolerable

safety, and where they sometimes heave small vessels down.

A Portuguese captain told me, that about half a league from the road, in the direction of S. E., in a line between it and the south side of Pico, lies a sunken rock, over which is twenty-two feet water, and on which the sea breaks in hard gales from the south. He also assured me, that of all the shoals that are laid down in our charts and pilot-books about these isles, not one has any existence but the one between the islands of St. Michael and St. Mary, called Hormingan. — This account may be believed, without relying entirely upon it. He further informed me, that it is forty-five leagues from Fayal to the island of Flores; and that there runs a strong tide between Fayal and Pico, the flood setting to the N. E. and the ebb to the S. W., but that out at sea, the direction is east and west. Mr. Wales having observed the times of high and low water, by the shore, concluded that it must be high water at the full and change about twelve o'clock, and the water riseth about four or five feet.

The distance between Fayal and Flores was confirmed by Mr. Rebiers, lieutenant of the French frigate, who told me, that, after being by estimation two leagues due south of Flores, they made forty-four leagues, on a S. E. by E., course by compass, to St. Catherine's Point, on Fayal.

I found the latitude of the ship at anchor in the bay	38°	31′	55″	N.
By a mean of seventeen sets of lunar observations, taken before we arrived, and reduced to the bay by the watch, the longitude was made - - - - -	28	24	30	W.
By a mean of six sets after leaving it, and reduced back by the watch - -	28	53	22	

Longitude by observation	28°	38′	56″
Ditto, by the watch - :	28	55	45
Error of the watch on our arrival at Portsmouth :	—	16	26½
True longitude by the watch	28	39	18½

I found the variation of the compass, by several azimuths, taken by different compasses on board the ship, to agree very well with the like observations made by Mr. Wales on shore; and yet the variation thus found, is greater by 5°, than we found it to be at sea; for the azimuths taken on board, the evening before we came into the bay, gave no more than 16° 18′ west variation, and the evening after we came out, 17° 33′ west.

I shall now give some account of the variation, as observed in our run from the Island of Fernando De Noronho, to Fayal. The least variation we found was 37′ W., which was the day after we left Fernando De Noronho, and in the latitude of 33′ S., longitude 32° 16′ W. The next day, being nearly in the same longitude, and in the latitude of 1° 25′ N. it was 1° 23′ west; and we did not find it increase till we got into the latitude of 5° N., longitude 31° west. After this our compasses gave different variations, viz. from 3° 57′ to 5° 11′ W. till we arrived in the latitude of 26° 44′ north, longitude 41° west, when we found 6° west. It then increased gradually, so that in the latitude of 35° N. longitude 40° W., it was 10° 24′ W.; in the latitude of 38° 12′ N., longitude 32½° W., it was 14° 47′; and in sight of Fayal 16° 18′ W., as mentioned above.

Having left the bay at four in the morning of the 19th, I steered for the west end of St. George's Island. As soon as we had passed it, I steered E. ¼ S. for the Island of Tercera; and after having run thir-

teen leagues, we were not more than one league from the west end. I now edged away for the north side, with a view of ranging the coast to the eastern point, in order to ascertain the length of the island; but the weather coming on very thick and hazy, and night approaching, I gave up the design, and proceeded with all expedition for England.

On the 29th, we made the land near Plymouth. The next morning, we anchored at Spithead; and the same day, I landed at Portsmouth, and set out for London, in company with Messrs. Wales, Forsters, and Hodges.

Having been absent from England three years and eighteen days, in which time, and under all changes of climate, I lost but four men, and only one of them by sickness, it may not be amiss, at the conclusion of this journal, to enumerate the several causes to which, under the care of Providence, I conceive, this uncommon good state of health experienced by my people was owing.

In the Introduction, mention has been made of the extraordinary attention paid by the Admiralty, in causing such articles to be put on board as, either from experience or suggestion, it was judged would tend to preserve the health of the seamen. I shall not trespass upon the reader's time in mentioning them all, but confine myself to such as were found the most useful.

We were furnished with a quantity of malt, of which was made *Sweet Wort.* To such of the men as showed the least symptoms of the scurvy; and also to such as were thought to be threatened with that disorder, this was given from one to two or three pints a day each man; or in such proportion as the surgeon found necessary, which sometimes amounted to three quarts. This is, without doubt, one of the best antiscorbutic sea medicines yet discovered: and, if used in time, will, with proper attention to other things,

I am persuaded, prevent the scurvy from making any great progress for a considerable while. But I am not altogether of opinion that it will cure it at sea.

Sour Krout, of which we had a large quantity, is not only a wholesome vegetable food, but, in my judgment, highly antiscorbutic; and it spoils not by keeping. A pound of this was served to each man when at sea, twice a week or oftener, as was thought necessary.

Portable Broth was another great article, of which we had a large supply. An ounce of this to each man, or such other proportion as circumstances pointed out, was boiled in their pease, three days in the week; and when we were in places where vegetables were to be got, it was boiled with them, and wheat or oatmeal, every morning for breakfast; and also with pease and vegetables for dinner. It enabled us to make several nourishing and wholesome messes, and was the means of making the people eat a greater quantity of vegetables than they would otherwise have done.

Rob of Lemon and *Orange* is an antiscorbutic we were not without. The surgeon made use of it in many cases, with great success.

Amongst the articles of victualling, we were supplied with *Sugar* in the room of *Oil*, and with *Wheat* for a part of our *Oatmeal;* and were certainly gainers by the exchange. Sugar, I apprehend, is a very good antiscorbutic; whereas oil, (such as the navy is usually supplied with,) I am of opinion, has the contrary effect.

But the introduction of the most salutary articles, either as provisions or medicines, will generally prove unsuccessful, unless supported by certain regulations. On this principle, many years' experience, together with some hints I had from Sir Hugh Palliser, Captains Campbell, Wallis, and other intelligent officers,

enabled me to lay a plan whereby all was to be governed.

The crew were at three watches, except upon some extraordinary occasions. By this means they were not so much exposed to the weather as if they had been at watch and watch; and had generally dry cloaths to shift themselves, when they happened to get wet. Care was also taken to expose them as little to wet weather as possible.

Proper methods were used to keep their persons, hammocks, bedding, cloaths, &c. constantly clean and dry. Equal care was taken to keep the ship clean and dry betwixt decks. Once or twice a week she was aired with fires; and when this could not be done, she was smoked with gunpowder mixed with vinegar or water. I had also frequently a fire made in an iron pot at the bottom of the well, which was of great use in purifying the air in the lower parts of the ship. To this and to cleanliness, as well in the ship as amongst the people, too great attention cannot be paid; the least neglect occasions a putrid and disagreeable smell below, which nothing but fires will remove.

Proper attention was paid to the ship's coppers, so that they were kept constantly clean.

The fat which boiled out of the salt beef and pork, I never suffered to be given to the people; being of opinion that it promotes the scurvy.

I was careful to take in water wherever it was to be got, even though we did not want it. Because I look upon fresh water from the shore, to be more wholesome than that which has been kept some time on board a ship. Of this essential article, we were never at an allowance, but had always plenty for every necessary purpose. Navigators in general cannot, indeed, expect, nor would they wish to meet with, such advantages in this respect, as fell to my lot. The nature of our voyage carried us into very high latitudes. But the hardships and dangers inse-

parable from that situation, were, in some degree, compensated by the singular felicity we enjoyed, of extracting inexhaustible supplies of fresh water from an ocean strewed with ice.

We came to few places, where either the art of man, or the bounty of nature, had not provided some sort of refreshment or other, either in the animal or vegetable way. It was my first care to procure whatever of any kind could be met with, by every means in my power; and to oblige our people to make use thereof, both by my example and authority; but the benefits arising from refreshments of any kind soon became so obvious, that I had little occasion to recommend the one or to exert the other.

It doth not become me to say how far the principal objects of our voyage have been obtained. Though it hath not abounded with remarkable events, nor been diversified by sudden transitions of fortune; though my relation of it has been more employed in tracing our course by sea, than in recording our operations on shore; this, perhaps, is a circumstance from which the curious reader may infer, that the purposes for which we were sent into the southern hemisphere were diligently and effectually pursued. Had we found out a continent there, we might have been better enabled to gratify curiosity; but we hope our not having found it, after all our persevering searches, will leave less room for future speculation about unknown worlds remaining to be explored.

But, whatever may be the public judgment about other matters, it is with real satisfaction, and without claiming any merit but that of attention to my duty, that I can conclude this account with an observation which facts enable me to make, that our having discovered the possibility of preserving health amongst a numerous ship's company, for such a length of time, in such varieties of climate, and

amidst such continued hardships and fatigues, will make this voyage remarkable in the opinion of every benevolent person, when the disputes about a Southern Continent shall have ceased to engage the attention, and to divide the judgment of philosophers.

A

VOCABULARY

OF THE

LANGUAGE

OF THE

SOCIETY ISLES.

DIRECTIONS

FOR THE

PRONUNCIATION OF THE VOCABULARY.

As all nations who are acquainted with the method of communicating their ideas by characters (which represent the sound that conveys the idea), have some particular method of managing or pronouncing the sounds represented by such characters, this forms a very essential article in the constitution of the language of any particular nation, and must therefore be understood before we can make any progress in learning, or be able to converse in it. But as this is very complex and tedious to a beginner, by reason of the great variety of powers the characters of letters are endued with under different circumstances, it would seem necessary, at least in languages which have never before appeared in writing, to lessen the number of these varieties, by restraining the different sounds, and always representing the same simple ones by the same character; and this is no less necessary in the English than any other language, as this variety of powers is very frequent, and without being taken notice of in the following Vocabulary, might render it entirely unintelligible. As the vowels are the regulation of all sounds, it is these only that need be noticed, and the powers allotted to each of these in the Vocabulary is subjoined.

A in the English language is used to represent two different simple sounds, as in the word Arabia, where the first and last have a different power

from the second. In the Vocabulary this letter must always have the power, or be pronounced like the first and last in Arabia. The other power or sound of the second *a*, is always represented in the Vocabulary by *a* and *i*, printed in Italics thus, *ai*.

E has likewise two powers, or it is used to represent two simple sounds, as in the words Eloquence, Bred, Led, &c. and it may be said to have a third power, as in the words Then, When, &c. In the first case, this letter is only used at the beginning of words, and wherever it is met with in any other place in the words of the Vocabulary, it is used as in the second case: but never as in the third example; for this power or sound is every where expressed by the *a* and *i* before mentioned, printed in Italics.

I is used to express different simple sounds, as in the words Indolence, Iron, and Imitation. In the Vocabulary it is never used as in the first case, but in the middle of words; it is never used as in the second example, for that sound is always represented by *y*, nor is it used as in the last case, that sound being always represented by two *ees*, printed in Italics in this manner, *ee*.

O never alters in the pronunciation, *i. e.* in this Vocabulary, of a simple sound, but is often used in this manner, *oo*, and sounds as in Good, Stood, &c.

U alters, or is used to express different simple sounds, as in Unity, or Umbrage. Here the letters *e* and *u*, printed in Italics *eu*, are used to express its power as in the first example, and it always retains the second power, wherever it is met with.

Y is used to express different sounds, as in My, By, &c. &c. and in Daily, Fairly, &c. Wherever it is met with in the middle or end (*i. e.* any where but at the beginning) of a word, it is to be used as in the first example; but is never to be found as in

the second, for that sound or power is always represented by the Italic letter *e*. It has also a third power, as in the words Yes, Yell, &c. which is retained every where in the Vocabulary, at least at the beginning of words, or when it goes before another vowel, unless directed to be sounded separately by a mark over it, as thus, ÿa.

Unless in a few instances, these powers of the vowels are used throughout the Vocabulary; but, to make the pronunciation still less liable to change or variation, a few marks are added to the words as follows:

This mark: as öa, means that these letters are to be expressed singly.

The letters in Italic, as *ee* or *oo*, make but one simple sound.

When a particular stress is laid on any part of a word in the pronunciation, an accent is placed over that letter where it begins, or rather between that and the preceding one.

It often happens that a word is compounded as it were of two, or in some cases the same word or syllable is repeated. In these circumstances, a comma is placed under them at this division, where a rest or small space of time is left before you proceed to pronounce the other part, but it must not be imagined that this is a full stop.

Examples in all these Cases.

Röa, - - - - Great, long, distant.
E'reema, - - - Five.
Ry'poeea, - - Fog *or mist.*
E'hoora, - - - *To* invert, *or turn upside down.*
Paroo, roo, - - *A* partition, *division, or screen.*

VOCABULARY, &c.

A

To abide, *or remain* - - -	Ete'*ei*.
An Abode, *or place of residence* - -	Noho'ra.
Above, *not below* - - -	Neea, s. Tiéneea.
An Abcess - - - -	Fe'fe.
Action, *opposed to rest*, - -	Ta'eree.
Adhesive, *of an adhesive or sticking quality* - - - -	Oo'peere.
Adjoining, *or contiguous to* - -	E'peeiho.
Admiration, *an interjection of* - -	A'wai, s. A'wai to *Peeree-ai*.
An Adulterer, *or one that vexes a married woman* - - - -	Teeho teeho, s. Teeho teeho, ta'rar.
To agitate, *or shake a thing, as water, &c.* - - - -	Eooa'wai.
Aliment, *or food of any kind* - -	Maa.
Alive, *that is not dead* - -	Waura.
All, *the whole, not a part* - -	A'maoo.
Alone, *by one's self* - -	Ota'hoi.
Anger, *or to be angry* - -	Warradee, s. Reedee.
To angle, *or fish* - - -	E'hootee.
The Ankle - - -	Momöa.
The inner Ankle - - - -	A'tooa, ewy.
Answer, *an answer to a question* -	Oo'maia.
Approbation, *or consent*, - -	Madooho'why.
Punctuated Arches *on the hips* -	E'var're.
The Arm - - - -	Reema.
The Armpit - - - -	E'e.
An Arrow - - - -	E'oome.

Arrow, *the body of an arrow or reed*	O'wha.
The point of an Arrow	To'*ai*, s. O'möa.
Ashamed, *to be ashamed or confused*	Ama, s. He'ama.
Ashore, *or on shore*	Te Euta.
To ask *for a thing*	Ho'my, s. Ha'py my.
Asperity, *roughness*	Tarra, Tarra.
An Assassin, *murderer, or rather man-killer, soldier or warrior*	Taata, töa.
An Assembly, *or meeting*	Ete*ou'rooa*.
Atherina	A'na*iheu*.
Avaricious, *parsimonious, ungenerous*	Pee'peere.
Averse, *unwilling to do a thing*	Fata, hoito' *hoito*.
Authentic, *true*	Paro*u*, mo*u*.
Awake, *not asleep*	Arra, arra', s. E'ra.
Awry, *or to one side; as a wry neck*	Na'na.
An Axe, *hatchet or adze*	Töe.
Ay, *yes; an affirmation*	*Ai*.

B.

A Babe, *or child*	Mydidde.
A Batchelor, *or unmarried person*	E'evee (taata.
The Back	To*oa*.
To wipe the Backside	Fy'*roo*, too'ty.
Bad, *it is not good*	'Eè'no.
A Bag *of straw*	Ete'öe, s. Eäte.
Bait, *for fish*	Era'*eu*noo.
Baked *in the oven*	Et*oo*noo.
Bald-headed	*Oo*po'boota.
Bamboo	*Eenee'ou*.
A Bank, *or shoal*	E'paa.
Bare, *naked, applied to a person that is undressed*	Ta'turra.
The Bark *of a tree*	Ho'hore.
Barren *land*	Fe'nooa Ma*oure*.
A large round Basket *of twig*	He'na.
A small Basket *of cocoa leaves*	Va*i*'hee.
A long Basket *of cocoa leaves*	Apo'*aira*.
A Basket *of plantain stock*	Papa' Ma*ieea*.
A fisher's Basket	Er're'vy.
A round Basket *of cocoa leaves*	Mo'ene.
A Bastard	Fanna *too*'nee*a*.
Bastinado, *to bastinade or flog a person*	Tapra'*hai*.

To bathe	Ob'*oo*.
A Battle, *or fight*	E'motto.
A Battle-axe	O'morre.
To bawl, *or cry aloud*	Te*i*mo'toro.
A Bead	Pöe.
The Beard	*Oo*me *oo*me.
To beat *upon, or strike a thing*	To*o*'py *or* To*o*'ba*ee*.
To beat *a drum*	Ero*o*'ko*o*.
To beckon *a person with the hand*	Ta'rappe.
A Bed, *or bed-place*	E'ro*ee*, s. Möï'a.
To bedawb, *or bespatter*	Par'ry.
A Bee	E'räo.
A Beetle	Pe*e*re'te*ee*.
Before, *not behind*	Te'möa.
A Beggar, *a person that is troublesome, continually asking for somewhat*	Tapa'ro*o*.
Behind, *not before,*	Te'moore*e*.
To belch	Ero*o*'y.
Below, *as below stairs*	Tei'dirro, s. Teedi-raro.
Below, *underneath, far below*	O'raro.
To Bend *any thing, as a stick, &c.*	Fa'fe'fe.
Benevolence, *generosity*	Ho'röa.
e. g. *You are a generous man*	Taata ho'roa öe.
Between, *in the middle, betwixt two*	Fero'po*o*.
To bewail, *or lament by crying*	E'tate*e*.
Bigness, *largeness, great*	Ara'hay.
A Bird	Manoo.
A Bitch	*Oo*re, e'*oo*ha.
To bite, *as a dog*	A'aho*o*.
Black, *colour*	Ere, ere.
Bladder	Töa'me eme.
A Blasphemer, *or person who speaks disrespectfully of their deities*	To*o*na, (*taa*ta.
Blind	Matta-po.
A Blister, *raised by a burn or other means*	Mei'*ee*.
Blood,	Toto, s. Eho*o*'*ei*.
To blow *the nose*	Fatte.
The blowing, *or breathing of a whale*	Ta'hora.
Blunt, *as a blunt tool of any sort*	Ma'ne*e*a.
The carved Boards *of a Maray*	E'ra.
A little Boat, *or canoe*	E'väa.
A Boil	Fe'fe.
Boldness	Eäwo*u*.
A Bone	E'eve*e*.

A Bonetto, *a fish so called*	Peera'ra.
To bore *a hole*	Ehoo'*ee*, s. Eh*oo*'o.
A Bow	E'fanna.
A Bow-string	Aroö'h*ooa*.
To bow *with the head*	Etoo'o.
A young Boy,	My'didde.
Boy, *a familiar way of speaking*	He'amane*e*.
The Brain *of any animal*	A'b*ooba*.
A Branch *of a tree or plant*,	E'ama.
Bread-fruit, *or fruit of the bread-tree*	*Ooroo*.
Bread-fruit, *a particular sort of it*	E'patëa.
An insipid paste of Bread-fruit	Eh'öe.
The gum of the Bread-tree	Tappo'*ooroo*.
The leaf of the Bread-tree	E'da'*ooroo*.
The pith of the Bread-tree	Po'*ooroo*.
To break *a thing*	O'whatte, s. Owhanne, s. Fatte.
The Breast,	O'ma.
A Breast-plate *made of twigs, ornamented with feathers, dog's hair, and pearl shell*	Ta'*oo*me.
To breathe	Watte *wee*te *wee* të'aho.
Bring, *to ask one to bring a thing*,	Ho'my.
Briskness, *being brisk or quick*	T*ee*'te*e*re.
Broiled, *or roasted as broiled meat*	*Oo*awe*e*ra.
Broken, *or cut*	Mo*too*.
The Brow, *or forehead*	E'ry.
A brown *colour*	A'ur*aura*.
Buds *of a tree or plant*	Te, arre'h*aoo*.
A Bunch *of any fruit*	E'ta.
To burn *a thing*	Döodo*oe*.
A Butterfly	Pepe.

C.

To call *a person at a distance*	Tooo'to*o*'o*oo*.
A Calm	Ma'n*ee*no.
A Calm, *or rather to be so placed that the wind has no access to you*	E*ou*, she'a.
Sugar Cane	'Töo, s. Etöo.
A Cap, *or covering for the head*	T*au*'matta.
To carry *any thing*	E'a'mo.
To carry *a person on the back*	Eva'ha.

To catch a thing hastily with the hand, as a fly, &c. - - - - - Po'poee, s. Peero.
To catch *a ball* - - - - Ama'wheea.
To catch *fish with a line* - - E'hoote.
A Caterpillar - - - - E'tooa.
Celerity, swiftness - - - Tee'teere, s. E'tirre.
The Centre, *or middle of a thing* - Tera'poe.
Chalk - - - - - - Mamma'tëa.
A Chatterer, *or noisy impertinent fellow* - Taata E'moo, s. E'moo.
Cheerfulness - - - - Wara.
The Cheek - - - - Pappa'reea.
A Chest - - - - 'Peeha.
The Chest, *or body* - - - O'poo.
To chew, *or eat* - - - E'y.
Chequered, *or painted in squares* - Poore, poore.
A Chicken - - - - - Möa pee'riaia.
A Chief, *or principal person; one of the first rank amongst the people* - Eäree.
An inferior Chief, *or one who is only in an independent state, a gentleman* - Too'ou.
Child-bearing - - - - - Fanou, e'vaho.
Children's *language* - - Father O'pucenoo, *and* Papa.
Mother E'wheiarre, *and* O'pa'tëa.
Brother E'tama.
Sister Te'tooa.
The Chin, *and lower jaw* - - E'taa.
Choked, *to be choked as with victuals, &c.* - - - - - - Epoo'neina, s. Eroo'y.
To choose, *or pick out* - - - Eheee, te, me, my, ty.
Circumcision, *or rather an incision of the foreskin* - - - - Eoore, te'hai.
A sort of Clappers *used at funerals* - Par'haoo.
Clapping *the bend of the arm smartly with the hand, so as make a noise, an Indian custom* - - - E'too.
The Claw, *of a bird* - - - A'ee oo.
Clay, *or clammy earth* - - - Ewhou, arra.
Clean, *not nasty* - - - - Qoa'ma, s. Eoo'ee.
Clear, *pure; as clear water, &c.* - Tëa'te.
White clayey Cliffs - - - E'mammatëa.
Close, *shut* - - - - - Eva'hee.

Cloth *of any kind, or rather the covering or raiments made of it*	Ahóo.
A piece of oblong Cloth, *slit in the middle, through which the head is put, and it then hangs down behind and before*	Teeboota.
Brown thin Cloth	*Oo'erai.*
Dark brown Cloth	Poo'heere.
Nankeen coloured Cloth	A'heere, s. *Ooa.*
Gummed Cloth	Oo'*air* ara.
Yellow Cloth	Heappa, heappa, s. A'ade, poo'*ee ei*, s. Oora poo'*ee ei.*
Cloth, *a piece of thin white cloth wrapt round the waist, or thrown over the shoulders*	Paroo'y, *by which name they also call a white shirt.*
A Cloth-beater, *or an oblong square piece of wood grooved and used in making cloth*	To'aa.
The Cloth-plant, *a sort of Mulberry tree*	Eaoute.
A Cloud	E'äo, s. E'a*oo.*
A Cock	Möa, e'töa.
Cock, *the cock claps his wings*	Te Moa Pa*ee*, pa*ee.*
A Cock-roach	Potte potte.
A Cocoa nut	*A'ree.*
The fibrous husk of a Cocoa-nut	Pooroo' waha, s. Poo-roo.
Cocoa-nut oil	E'rede, äe.
Cocoa leaves	E,ne'ha*oo.*
Coition	E'y.
The sense of Cold	Ma'*ree*de.
A Comb	P'ahoro, s. Pa'her-re.
Company, *acquaintance, gossips*	Te*e'*ÿa.
Compliance *with a request, cousent*	Mad*oo*, ho'why.
Computation, *or counting of numbers*	Ta'*tou.*
A Concubine	Wa'h*ei*ne, Möebo, s. Etoo'n*ee*a.
Confusedness, *without order*	E'vah*ee*a.
Consent, *or approbation*	Mad*oo*, ho'why.
Contempt, *a name of contempt given to a maid, or unmarried woman*	Wah*ei*ne, po*o*'ha.
Conversation	Para*ou*, maro, s. Para'para*ou.*
A sort of Convolvulus, *or bind weed, common in the Islands*	O'ho*oe.*

Cooked, dressed; not raw	Ee'*oo*, s. E*ee*'wera.
To cool *one with a fan*	Taha'*ree*.
Cordage *of any kind*	Taura.
The Core *of an apple*	Böe.
A Cork, *or stopper of a bottle or gourd shell*	Ora'*hooe*.
A Corner	E'pecho.
Covering, *the covering of a fish's gills*	P*eee*'eya.
Covetousness, *or rather one not inclined to give*	Pee,peere.
A Cough	Ma're.
To court, *woo a woman*	Ta'raro.
Coyness *in a woman*	No'nöa.
A Crab	Pappa.
Crab, *a large land crab that climbs the cocoa-nut trees for fruit*	E'*oo*wa.
A Crack, *cleft, or fissure*	Mot*oo*.
Crammed, *lumbered, crowded*	Ooa *pee*a'pe, s. Ehotto.
The Cramp	Emo'*too too*.
A Cray fish,	O'*oo*ra.
To creep *on the hands and feet*	Ene'*ai*.
Crimson *colour*	*Oo*ra *oo*ra.
Cripple, *lame*	T*ei*'*tei*.
Crooked, *not straight*	*Ooo*'pe*eo*.
To crow *as a cock*	A'a *oo*a.
The Crown *of the head*	T*oo*'p*ooe*.
To cry, *or shed tears*	Ta*ee*.
A brown Cuckoo, *with black bars and a long tail, frequent in the isles*	Ara'werewa.
To cuff, *or slap the chops*	E'par*oo*.
Curlew, *a small curlew or whimbrel found about the rivulets*	Torëa.
Cut, or divided	Mot*oo*.
To cut *the hair with scissars*	O'tee.

D

A Dance	He*eva*.
Darkness	P*oee*'*ree*, s. P*ooo*'*ree*.
To darn	O'ono.
A Daughter	Ma'h*ei*ne.
Day, *or day-light*	Mara'marama. s. A'*ou*, s. A'a *ou*.

Day-break	Oota'taheita.
Day, *to-day*	A*oo'*nai.
Dead	Matte röa.
A natural Death	Matte nöa.
Deafness	Ta'r*eea, tooree.*
Decrepit	Epoo't*ooa.*
Deep-water	Mona'.
A Denial, *or refusal*	Eh*oo'* nöa.
To desire, *or wish for a thing*	E*ooee.*
A Devil, *or evil spirit*	E't*ee.*
Dew	Ahe'a*oo.*
A Diarrhœa, *or looseness*	Hawa, hawa.
To dip *meat in salt water instead of salt (an Indian custom)*	Faw*ee'*wo.
Dirt, *or nastiness of any kind*	E'repo.
Disapprobation	Eh*oo*nöa.
A Disease, *where the head cannot be held up, perhaps the palsy*	E'p*ee.*
To disengage, *untie or loosen*	Ea*oo'*w*ai.*
Dishonesty	E*ee'*a.
Displeased, *to be displeased, vexed, or in the dumps*	Ta*ee'*va.
Dissatisfaction, *to grumble, or be dissatisfied*	Fa*oo'*oue.
Distant, *far off*	Röa.
To distort, *or wreath the limbs, body, lips, &c.*	Faee'ta.
To distribute, *divide or share out*	Ato*o'*ha.
A District	Mate*i'*na.
A Ditch	Eö'h*oo.*
To dive *under water*	Eho'p*oo.*
A Dog	*Ooree.*
A Doll *made of cocoa-plats*	Ado*o'*a.
A Dolphin	A'*ou*na.
Done, *have done; or that is enough, or there is no more*	A'teera.
A Door	*Oo'*boota.
Double, *or when two things are in one; as a double canoe*	Tau'r*ooa.*
Down, *or soft hair*	E'waou.
To draw *a bow*	Etëa.
To draw, *or drag a thing by force*	Era'ko.
Dread, *or fear*	Mattou.
Dress'd, *or cook'd, not raw*	Ee'*oo.*
A head Dress, *used at funerals*	Pa'r*aee.*

To dress, *or put on the clothes* - *Eu*, hau'hooo t' Ahoo.
To drink - - - Aee'noo.
Drop, *a single drop of any liquid* - *Oo*, ata'hai.
To drop, *or leak* - - Eto'*tooroo*, s. E'-*tooroo*.
Drops, *as drops of rain* - - To'potta.
Drowned - - Parre'mo.
A Drum - - - Pa'*hoo*.
Dry, *not wet* - - Oo'maro.
A Duck - - - Mora.
A Dug, *teat, or nipple* - - Eoo.
Dumbness - - - E'faö.

E

The Ear - - Ta'*reea*.
The inside of the Ear - - Ta'*tooree*.
An Ear-ring - - Poe note ta*reea*.
To eat, *or chew* - - E'y, s. Mäa.
An Echinus, *or sea egg* - - Heawy.
Echo - - - Tooo.
An egg *of a bird* - - Ehooero.te Man*oo*.
A white Egg bird - - Pee'ry.
Eight - - - - A'waroo.
The Elbow - - - To*o*'*ree*.
Empty - - - - Ooata'aö, s. Ta-ta'*ooa*.
An Enemy - - - Taata'e.
Entire, *whole, not broke* - - Eta, Eta.
Equal - - - - *Oohy'tei*.
Erect, *upright* - - - Eto*o*.
A Euphorbium *tree, with white flowers* Te'too*ee*.
The Evening - - - Ooho*i*'ho*i*.
Excrement - - - To*o*'ty.
To expand, *or spread out cloth, &c.* - Ho'hora.
The Eye - - - Matta.
The Eye-brow, *and eye-lid* - - To*oa*, matta.

F

The Face - - - E'mo*teea*.
To hide or hold the Face *away, as when ashamed* - - - Faree'wai.

Facetious, *merry*	Faatta atta.
Fainting, *to faint*	Möe, mo'my.
To fall *down*	Topa.
False, *not true*	Ha'warre.
A Fan, *or to fan the face, or cool it*	Taha'*ree*.
To fart, *or a fart*	E*hoo*.
Fat, *full of flesh, lusty*	P*eea*.
The Fat *of meat*	Ma*ee*.
A Father	Med*ooa* tanne.
A step-father	Tanne, te höa.
Fatigued, *tired*	E'*heieu*, s. Faea.
Fear	Mattou.
A Feather, *or quill*	H*ooroo*, h*ooroo* man*oo*.
Red Feathers	Ora, h*ooroo* te man*oo*.
Feebleness, *weakness*	Fara'ra, s. Too-ro'*ree*.
The sense of Feeling	Fa'fa.
To feel	Tear'ro.
A young, clever, dexterous Fellow, *or boy*	Te'my de pa'a-*ree*.
The Female *kind of any animal*	E'*ooha*.
The Fern-tree	Ma'm*ooo*.
Fertile *land*	Fen*ooa*, maa.
Fetch, *go fetch it*	Atee.
Few *in number*	Eote.
To fight	E'neotto.
A Fillip, *with the fingers*	Epatta.
The Fin *of a fish*	Tirra.
To finish *or make an end*	Eiote.
A Finger	E'*ree*ma.
Fire	Ea'hai.
A flying Fish	Mara'ra.
A green flat Fish	E*eu*me.
A yellow flat Fish	*Oo*'morehe.
A flat green and red Fish	P*ai*'*ou*.
The cuckold Fish	Etata.
A Fish	*Eya*.
Fishing *wall for hauling the seine at the first point*	Epa.
A Fish *pot*	E'wha.
A long Fishing *rod of Bamboo, used to catch bonettoes, &c.*	Ma'k*eera*.
A Fissure, *or crack*	Motoo.

Fist, *to open the fist*	Ma'hora.
Fist, *striking with the fist in dancing*	A'moto.
A flie Flapper, *or to flap flies*	Dahee'ere e'reupa.
Flatness, *applied to a nose, or a vessel broad and flat; also a spreading flat-topt tree*	Papa.
A red Flesh *mark*	Eee'da.
To float *on the face of the water*	Pa'noo.
The Flower, *of a plant*	Pooa.
Open Flowers	Teearre'oo wa.
Flowers, *white odoriferous flowers used as ornaments in the ears*	Teearre tarreea.
Flown, *it is flown, or gone away*	Ma'houta.
A Flute	Weewo.
A black Fly-catcher, *a bird so called*	O'mamäo.
A Fly	Poore'hooa.
To fly, *as a bird*	E'raire.
Fog, *or mist*	Ry'poeea.
To fold *up a thing, as cloth, &c.*	He'fetoo.
A fool, *scoundrel, or other epithet of contempt*	Ta'ouna.
The Foot, *or sole of the foot*	Tapooy.
The Forehead	E'ry.
Forgot, *or lost in memory*	Oo'aro.
Foul, *dirty, nasty*	Erepo.
A Fowl	Möa.
Four	E'ha.
The Frapping *of a flute*	Ahëa.
Freckles	Taina.
Fresh, *not salt*	Eanna, anna.
Friction, *rubbing*	E'oo ee.
Friend, *a method of addressing a stranger*	Ehöa.
A particular Friend, *or the salutation to him*	E'apatte.
To frisk, *to wanton, to play*	E'hanne.
From *there*	No, reira, s. No, reida.
From *without*	Nö, waho'oo.
From *before*	No, mooa.
Fruit	'Hoo'ero.
Perfume Fruit, *from Tethuroa, a small island*	Hooero te manoo.
A yellow Fruit, *like a large plumb, with a rough core*	A'vee.

Full, *satisfied with eating* -	Pÿa, s. *Oo*'pÿa, s. Paÿa.
A Furunculus, *or a small hard boil* -	Apoo.

G

A Garland *of flowers* -	A'*vou*too, s. Arou-too E'fha, apai.
Generosity, *benevolence* -	Ho'röa.
A Gimblet - - -	Eho'*oo*.
A Girdle - - -	Ta'*too*a.
A Girl, *or young woman* -	Too'*nee*a.
A Girthing *manufacture* -	Tato*o*'y.
To give *a thing* - -	Höa'*too*.
A looking-Glass - -	H*ee*o'*ee*ota.
A Glutton, *or great eater* -	Taata A'*ee*. s. Era'-pöa *noo*e.
To go, *or move from where you stand, to walk* - - -	Harre.
To go, *or leave a place* -	Era'wa.
Go, *begone, make haste and do it*	Haro.
Go *and fetch it* - -	A*tee*.
Good, *it is good, it is very well*	My'ty, s. Myty, tye, s. Maytay.
Good-*natured* - - -	Mama'h*ou*, s. Ma'-*roo*.
A Grandfather - -	Too'b*oo*na.
A Great-grandfather - -	Tooboona tahe'too.
A Great-great-grandfather -	Ouroo.
A Grandson - - -	Mo'b*oo*na.
To grasp *with the hand* - -	Hara'w*ai*.
Grasping *the antagonist's thigh when dancing* - - - -	Tomo.
Grass, *used on the floors of their houses*	Ano'noho.
To grate *cocoa-nut kernel* - -	E'annatehea'*ree*.
Great, *large, big* - - -	Ara'h*ai*.
Green *colour* - - -	P*oo*re, p*oo*re.
To groan - - - -	Er*oo*, whe.
The groin - - - -	Ta'pa.
To grow *as a plant, &c.* - -	We'r*oo*a.
To grunt, *or strain* - - -	Etee, t*oo*whe
The blind Gut - - -	Ora'b*oo*b*oo*.
The Guts *of any animal* - -	A'a*oo*.

H

The Hair *of the head*	E'roroo, s. E'rohoo-roo.
Grey Hair	Hinna'heina.
Red Hair, *or a red-headed man*	E'hoo.
Curled Hair	Peepee.
Woolly or frizzled Hair	Oë'töeto.
To pull the Hair	E'woua.
Hair, *tied on the crown of the head*	E'poote.
Half *of any thing*	Fa'eete.
A Hammer	Etee'te.
Hammer *it out*	Atoo'bianoo.
The Hand	E'reema.
A deformed Hand	Peele'oi.
A motion with the Hand *in dancing*	O'ne o'ne.
A Harangue, *or speech*	Oraro.
A Harbour *or anchoring-place*	Too'tou.
Hardness	E'ta, e'ta.
A Hatchet, *axe, or adze*	Töe.
He	Nana.
The Head	Oopo.
A shorn Head	E'voua.
The Head-ache, *in consequence of Drunkenness*	Eana'neea.
The sense of Hearing	Faro.
The Heart *of an animal*	A'houtoo.
Heat, *warmth*	Mahanna, hanna.
Heavy, *not light*	Teima'ha.
The sea Hedge-hog	Totera.
A blue Heron	Otoo.
A white Heron	Tra'pappa.
To hew *with an axe*	Teraee.
Hibiscus, *the smallest species of Hibiscus, with rough seed cases, that adhere to the clothes in walking*	Peere, peere.
Hibiscus, *a species of Hibiscus, with large yellow flowers*	Pooo'rou.
The Hiccup	Etoo'ee, s. Eoo'wha.
Hide, *to hide a thing*	Eh'oona.
High, *or steep*	Mato.
A Hill, *or mountain*	Maoo, s. Maoo'a, s. Moua.

One tree Hill, *a hill so called in Mata-vai Bay*	Tal'ha.
To hinder, *or prevent*	Tapëa.
The Hips	E'tohe.
Hips, *the black punctuated part of the hips*	Tamo'*rou*.
To hit *a mark*	Ele'ba*ou*, s. Wa'-poota.
Hiss, *to hiss, or hold out the finger at one*	Tee'he.
Hoarseness	Efäo.
A Hog	Böa.
To hold *fast*	Mou.
Hold *your tongue, be quiet, or silent*	Ma'moo.
A Hole, *as a gimblet-hole in wood, &c.*	E'roo*a*, s. Poota.
To hollo, *or cry aloud to one*	Too'o.
To keep at home	Ate'*ei* te Efarre.
Honesty	Eea'*oure*.
A fish Hook	Ma'*tau*.
A fish hook *of a particular sort*	Weete, weete.
The Horizon	E'pa*ee* no t' Era*ee*.
Hot, *or sultry air, it is very hot*	Pohee'a.
A House	E'farre, s. E'wharre.
A House *of office*	Eha'moote.
A large House	Efarre'pota.
A House *on props*	A'whatta.
An industrious House-wife	Ma'*he*ine Ama*u*'hat-toi.
How *do you, or how is it with you*	Te'hanoöe.
Humorous, *droll, merry*	Fa, atta, 'atta.
Hunger	Poro'*ree*, s. Po-*ee*'a.
A Hut, *or house*	E'farre.

I

I, *myself*, 1*st person singular*	1*Wou* 2*Mee*.
The lower Jaw	E'ta.
Idle, *or lazy*	Tee'py.
Jealousy *in a woman*	Ta'boone, s. Fa-tecno, s. Hoo'-hy.
Ignorance, *stupidity*	Wee*a*'ta.
Ill-natured, *cross*	Oore, e'*ee*ore.
An Image *of a human figure*	E'tee.

Imps, *the young imps* - - Tëo'he.
Immature, *unripe, as unripe fruit* - Poo.
Immediately, *instantly* - - To'hyto.
Immense, *very large* - - Röa.
Incest, *or incestuous* - - Ta'wytte.
Indigent, *poor, necessitous* - - Tee, tee.
Indolence, *laziness* - - Tee'py.
Industry, *opposed to idleness* - Taee'a.
Inhospitable, *ungenerous* - - Pee'peere.
To inform - - - - E'whäe.
A sort of Ink, *used to punctuate* - E'rahoo.
An inquisitive *tattling woman* - - { Maheine Opataieehu.
To interrogate, *or ask questions* - Faeete.
To invert, *or turn upside down* - { E'hoora, tela'-why.
An Islet - - - - Mo'too.
The Itch, *an itching of any sort* - Myro.
To jump, *or leap* - - - { Mahouta, s. Araire.

K

Keep *it to yourself* - - - Vaihee'o.
The Kernel *of a cocoa-nut* - - Emo'teea.
To kick *with the foot* - - Ta'hee.
The Kidneys - - - Fooa'hooa.
Killed, *dead* - - - Matte.
To kindle, *or light up* - - Emäa.
A King - - - - Eäree, da'hai.
A King-fisher, *the bird so called* - E'rooro.
To kiss - - - - E'hoee.
Kite, *a boy's play-kite* - - O'omo.
The Knee - - - - E'tooree.
To kneel - - - - Too'tooree.
A Knot - - - - Ta'pona.
A double Knot - - - Va'hodoo.
The female Knot *formed on the upper part of the garment, and on one side* - { Teebona.
To know, *or understand* - - Eete.
The Knuckle, *or joint of the fingers* - Tee, poo.

L

To labour, *or work* - - - Ehëa.
A Ladder - - - Era'a, s. E'ara.

A Lagoon - - - - { Ewha'*ou*na, s. Eä'*ou*ma.
Lame, *cripple* - - - Te*i*'te*i*.
A Lance, *or spear* - - - Täo.
Land, *in general a country* - - { Fe'noo*a*, s. Whe'noo*a*.
Language, *speech, words* - - Pa'ra*ou*.
Language, *used when dancing* - { Timora'd*ee*, te'Timoro'd*ee*.
Large, *great, not small* - - Ara'h*ai*.
Largeness, *when applied to a country, &c.* - Noo*e*.
To laugh - - - - Atta.
Laziness - - - - Te*e*'py.
Lean, *the lean of meat* - - Aëo.
Lean, *slender, not fleshy* - - To*o*'h*ai*.
To leap - - - - Ma'h*ou*ta, s. A'rere.
Leave *it behind, let it remain* - - 'Va*i*nëo.
To leave - - - - E'wh*ee*o*o*.
The Leg - - - - A'wy.
Legs, *my legs ache, or are tired* - A'hoo*a*.
A Liar - - - - Taata, ha'warre.
To lie *down, or along, to rest one's self* - Ete'raha, s. Te'*poo*.
To lift *a thing up* - - - - Era'w*ai*.
Day Light - - - Mara'marama.
Light, *or fire of the great people* - To*ou*to*i*, papa.
Light, *or fire of the common people* - Ne*e*äo, papa.
Light, *to light or kindle the fire* - { A't*oo*no*o* t' E*ee*'were*a*.
Light, *not heavy* - - - Ma'ma.
Lightning - - - - *Oo*'wa*i*ra.
The Lips - - - - *Oo*'to*o*.
Little, *small* - - - - *Ee*te.
A Lizard - - - - Mö'o.
Loathsome, *nauseous* - - - 'E, a'wawa.
A sort of Lobster, *frequent in the isles* - Te*e*'on*ai*.
To loll *about, or be lazy* - - Te*e*'py.
To loll *out the tongue* - - Ewha't*oo*ro*o* t' Arero.
To look *for a thing that is lost* - Tapoone*e*.
A Looking-glass - - - He*eo*'*ee*'otta.
Loose, *not secure* - - - A*oo*'wee*w*a.
A Looseness, *or purging* - - Hawa, 'hawa.
To love - - - - Ehe'nar*oo*.
A Lover, *courtier, wooer* - - Eho*o*'nöa.
A Louse - - - - *Oo*'to*o*.

Low, *not high, as low land, &c.*	Hëa, hëa, s. Papoo, s. Eee'öa.
The Lungs	Teetoo, arapoa.
Lusty, *fat, full of flesh*	Oo'peea.

M

Maggots	E'hoohoo.
A Maid, *or young woman*	Too'nea.
To make *the bed*	Ho'hora, te Möe'ya.
The Male *of any animal, male kind*	E'töa.
A Man	Täata, s. Taane.
An ill-disposed, or insincere Man	Täata, ham'aneeno.
A Man *of war bird*	Otta'ha.
Many, *a great number*	Wo'rou, wo'rou, s. manoo, manoo.
A black Mark *on the skin*	E'ee'ree.
Married, *as a married man*	Fanou'nou.
A Mat	E'vanne.
A silky kind of Mat	Möe'a.
A rough sort of Mat, *cut in the middle to admit the head*	Poo'rou.
A Mast *of a ship or boat*	Teera.
Mature, *ripe; as ripe fruit*	Para, s. Pe.
Me, *I*	Wou, s. Mee.
A Measure	E'a.
To measure *a thing*	Fa'eete.
To meet *one*	Ewharidde.
To melt, *or dissolve a thing, as grease, &c.*	Too'tooe.
The Middle, *or midst of a thing*	Terepoo.
Midnight	O'toora, hei'po.
To mince, *or cut small*	E'poota.
Mine, *it is mine, or belongs to me*	No'oo.
To miss, *not to hit a thing*	Oo'happa.
Mist, *or fog*	Ry'poeea.
To mix *things together*	A'pooe, pooe.
To mock, *or scoff at one*	Etoo'hee.
Modesty	Mamma', haoo.
Moist, *wet*	Wara'ree.
A Mole *upon the skin*	Atoo'nöa.
A lunar Month,	Mara'ma.
A Monument, *to the dead*	Whatta'rau.
The Moon	Mara'ma.
The Morning	Oo'poee'poee.

To-morrow	Bo'bo, s. A, Bo'bo.
The day after to-morrow	A'bo'bo *doora*.
The second day after to-morrow	Poee, poee, addoo.
A Moth	E,pepe.
A Mother	Ma'*dooa*, wa', *heine*.
A motherly, *or elderly woman*	Pa'tëa.
Motion, *opposed to rest*	*Oo'ata*.
A Mountain, *or hill*	Ma*ooa*, s. M*oua*.
Mountains *of the highest order*	M*oua* tei'tei.
——————— *second order*	M*oua* 'haha.
——————— *third or lowest order*	Pere'ra*ou*.
Mourning	*Eeva*.
Mourning *leaves*, viz. *Those of the cocoa-tree used for that purpose*	Ta'pa*oo*.
The Mouth	Eva'ha.
To open the Mouth	Ha'mamma.
A Multitude, *or vast number*	Wo'r*ou*, wo'r*ou*.
Murdered, *killed*	Matte, s. Matte röa.
A Murderer	Taata töa.
A Muscle-shell	N*ou*,*ou*.
Music *of any kind*	H*ee*va.
A Musket, *pistol or fire-arm of any kind*	P*oo*,*poo*, s. Poo.
Mute, *silent*	Fatebo*oa*.
To mutter, *or stammer*	E'wha*oa*.

N

The Nail *of the fingers*	A*ee'oo*.
A Nail *of iron*	*Eure*.
Naked, *i. e. with the clothes off, undressed*	Ta'turra.
The Name *of a thing*	E*ee'oa*.
Narrow, *strait, not wide*	P*ee*re,p*ee*re.
Nasty, *dirty, not clean*	E,repo.
A Native	Taata'toobo*o*.
The Neck	A'*ee*.
Needles	Nareeda.
A fishing Net	*Oo'paia*.
New, *young, sound*	*Hou*.
Nigh	Poto, s. Whatta'ta.
Night	Po, s. E'a*oo*.
To-Night, *or to-day at night*	A'*oo*ne te' Po.
Black Night-*shade*	Oporo.

Nine	A'*ee*va.
The Nipple *of the breast*	E'*oo*.
A Nit	Eriha.
No, *a negation*	[1]Ay'ma, [2]Ya*i*ha, [3]A'*ou*re, [4]A*ee*, [5]Yeha*ee*a.
To nod	A'*touou*.
Noisy, *chattering, impertinent*	E'moo.
Noon	Wawa'tea.
The Nostrils	Popo'hëo.
Numeration, *or counting of numbers*	Ta'*tou*.
A cocoa Nut	Aree.
A large compressed Nut, *that tastes like chesnuts when roasted*	Ee*e*hee.

O

Obesity, *corpulence*	*Oo*'pe*e*a.
The Ocean	Ty, s. Meede.
Odoriferous, *sweet smelled*	No'nöa.
Perfumed Oil *they put on the hair*	Mo'nöe.
An Ointment *plaister, or any thing that heals or relates to medicine*	E'ra'pa*oo*.
Old	Ora'wheva.
One	A'tahai.
Open, *clear, spacious*	Ea'tëa.
Open, *not shut*	Fe'*rei*.
To open	Te'had'doo.
Opposite *to, or over against*	Watoo'wheitte.
Order, *in good order, regular, without confusion*	Wara'wara.
Ornament, *any ornament for the ear*	T*ooee* ta'r*ee*a.
Burial Ornaments, *viz. nine noits stuck in the ground*	Ma'ray Wharre.
An Orphan	*Oo*'hoppe, poo'*aia*.
Out, *not in, not within*	Te*i*we'ho.
The Outside *of a thing*	*Ooa*'p*ee*.
An Oven *in the ground*	E'*oomoo*.
Over, *besides more than the quantity*	Te'harra.
To overcome, *or conquer*	E'ma'*ooma*.
To overturn, *or overset*	Eha'pa*oo*.
An Owner	E'whattoo.
A large species of Oyster	I't*ee*a.
The large rough Oyster, *or Spondylus*	Paho'öa.

P

The Paddle *of a canoe, or to paddle*	E'höe.
To paddle *a canoe's head to the right*	Wha'tëa.
To paddle *a canoe's head to the left*	Wemma.
Pain, *or soreness, the sense of pain*	Ma'my.
A Pair, *or two of any thing together*	Ano'ho.
The Palate	E'ta'nea.
The Palm *of the hand*	Apoo'reema.
To pant, *or breathe quickly*	Oo'pou'pou, tëa'ho.
Pap, *or child's food*	Mamma.
A Parent	Me'dooa.
A small blue Parroquet	E'veenee.
A green Parroquet, *with a red forehead*	E'a'a.
The Part *below the tongue*	Eta'raro.
A Partition, *division of screen*	Paroo'roo.
A Pass, *or strait*	E,aree'ëa.
A fermented Paste *of bread, fruit, &c.*	Ma'hee.
A Path, *or road*	Eä'ra.
The Pavement *before a house or hut*	Pÿe,pye.
A Pearl	Pöe.
The Peduncle, *and stalk of a plant*	A'mäa, s. E'atta.
To peel, *or take the skin off a cocoa-nut, &c.*	A'tee, s. E'atee.
Peeled, *it is peeled*	Me'atee.
A Peg *to hang a bag on*	Te'aoo.
A Pepper-plant, *from the root of which they prepare an inebriating liquor*	Awa.
Perhaps, *it may be so*	E'pa'ha.
Persons *of distinction*	Patoo'nehe.
A Petticoat *of plantane leaves*	Arou'maieea.
Petty, *small, trifling, opposed to* Nooe	*Ree.*
A Physician, *or a person who attends the sick*	Taata no E'rapaoo.
Pick, *to pick or choose*	Ehee te mai my ty.
A large wood Pigeon	Eroope.
A small green and white Pigeon	Oo'oopa.
A small black and white Pigeon, *with purple wings*	Oooowy'deroo.
A Pimple	Hooa'houa.
To pinch *with the fingers*	Ooma.
A Plain, *or flat*	E'peeho.
Plane, *smooth*	Pa'eea.
A Plant *of any kind*	O'mo.

A small Plant	Era'bo.
The fruit of the Plantane-tree	Maiee'a, s. Maya.
Horse Plantanes	Fai'ee.
Pleased, *good-humoured, not cross or surly*	Maroo.
Pluck *it up*	Areete.
To pluck *hairs from the beard*	Hoohootee.
To plunge *a thing in the water*	E,oo'whee.
The Point *of any thing*	Oë,öo, or Oi,oi.
Poison, *bitter*	Awa,awa.
A Poll	Oora'hoo.
Poor, *indigent, not rich*	Tee'tee.
A bottle-nosed Porpoise	E'oua.
Sweet Potatoes	Oo'marra.
To pour *out any liquid substance*	Ma'nee.
Pregnant, *with young*	Waha'poo.
To press, *or squeeze the legs gently with the hand, when tired or pained*	Roro'mee.
Prick, *to prick up the ears*	Eoma te ta'reea.
A Priest	Ta'houa.
Prone, *or face downwards*	Tee'opa.
A sort of Pudding, *made of fruits, oil, &c.*	Po'po'ee.
Pumpkins	A'hooa.
To puke, *or vomit*	E'awa, s. e'roo'y.
Pure, *clear*	E'oo'ee.
A Purging, *or looseness*	Hawa,hawa.
To pursue, *and catch a person who has done some mischief*	Eroo,Eroo, s. Eha'roo.
To push *a thing with the hand*	Too'raee.
Put *it up, or away*	Orno.

Q

Quickness, *briskness*	E'tirre.
To walk quickly	Harre'neina.
Quietness, *silence, a silent or seemingly thoughtful person*	Falle'booa.
A Quiver *for holding arrows*	'Peeha.

R

A small black Rail, *with red eyes*	Mai'ho.
A small black Rail, *spotted and burred with white*	Pooa'nee.

Rain	E'ooa.
A Rainbow	E'nooa.
Raft, *a raft of bamboo*	Maito'e.
Rank, *strong, urinous*	Ewäo wao.
A Rasp, *or file*	Ooee.
A Rat	'Yoree, s. Eyore.
Raw *meat, flesh that is not dressed or cooked*	E'otta.
Raw *fruit, as plantanes, &c. that are not baked*	Paroure.
To recline, *or lean upon a thing*	E'py.
Red *colour*	Oora, *oora*, s. Matde.
To reef *a sail*	E'po'uie te rya.
A Refusal	Ehoo'noöa.
The Remainder *of any thing*	T,'Ewah*ei*.
To rend, *burst, or split*	Moo'moomoo.
Rent, *cracked or torn*	E'wha.
To reside, *live, or dwell*	E'noho.
Respiration, *breathing*	*Tooe*, tooe.
A Rib	A'wäo.
Rich, *not poor, having plenty of goods, &c.*	Epo'too.
A Ring	'Maino.
The Ringworm, *a disease so called*	E'nooa.
Ripe, *as ripe fruit, &c.*	Para, s. Pai, s. Ooo pai.
Rise, *to rise up*	A'too.
To rive, *or split*	Ewha*oo*'wha*oo*.
A Road, *or path*	Eä'ra.
Roasted, *or broiled*	*Ooa*'wa*ira*.
A Robber, *or thief*	E*ee*'a (taata.
A Rock	Pa*oo*.
A reef of Rocks	E'a*ou*.
Rolling, *the rolling of ship*	To*o*'ro*ore*.
A Root	Apoo, s. E'a.
A Rope *of any kind*	Taura.
Rotten, *as rotten fruit, &c.*	Ro*o*pe.
Rough, *not smooth*	Ta'rra, tarra.
To row *with oars*	E'*oo*me, s. E'höe.
To rub *a thing, as in washing the hands and face*	Ho'ro*ee*.
The Rudder *of a boat, or steering paddle of a canoe*	Höe, fa'herre.
Running *backwards and forwards, endeavouring to escape*	Oo'atapone.

S

The Sail *of a ship or boat*	E*ee'aia.*
To sail, *or to be under sail*	E'whano.
Salt, *or salt-water*	Ty'ty, s. Meede.
Sand, *dust*	E'one.
Saturn	Whati'hëa.
Saunders's *island*	Tabo*oa*, Manoo.
A Saw	E*ee'oo.*
A Scab	E'tona.
A fish's Scale, *or scales*	Pöa.
A pair of Scissars	O'*too*bo, s. O'toboo.
A Scoop *to empty water from a canoe*	E'tata.
To scrape *a thing*	*Oo'aoo.*
To scratch *with the fingers*	Era'ra*oo.*
Scratched, *a scratched metal, &c.*	Pahoore'hoore.
The Sea-cat, *a fish so called*	Poohe.
The Sea	Ta*ee*, s. M*ee*de.
A Sea-egg	He'awy.
A Seam *between two planks*	Fatoo'wh*a*ira.
To search *for a thing that is lost*	Oö, s. Päe'm*ee*.
A Seat	Papa.
Secret, *a secret whispering or slandering another*	Ohe'm*oo*.
The Seed *of a plant*	H*oo*a't*oo*to*o*, s. Ehooero.
The sense of Seeing	E'h*ee*'o.
To send	Eho'pöe.
A Sepulchre, *or burying-place*	Ma'ray.
A Servant	T*ow*t*ow*.
Seven	A'H*ee*t*oo*.
To sew, *or string*	E't*oo*e.
Seyne, *to haul a seyne*	Etoroo te p*a*ia.
Shady	Maroo,maroo.
To shake, *or agitate a thing*	E*oo*a'wai.
A Shark	Mäo.
Sharp, *not blunt*	Oö'ëe.
To shave, *or take off the beard*	Eva'r*oo*, s. Whanne, whanne.
A small Shell	Ote'o.
A tyger Shell	Pore'h*oo*.
Shew *it me*	Enara.
A Ship	Pahee.

Ship-wreck	Ara'wha.
A white Shirt	Paroo'y.
To shiver *with cold*	A'tete.
Mud Shoes, *or fishing shoes*	Tama.
The Shore	Euta.
Short	Po'potoo.
Shut, *not open*	Opa'nee, s. Poo'peepe.
Sickness	Matte my Mamy.
The left Side	A'roode.
The Side	E'reea'wo.
The right Side	Atou,a'taou.
Sighing	Fa'ëa.
Silence	Fatte'booa.
Similar, *or alike*	Oowhyä'da.
To sink	A'tomo.
A Sister	Too'heine.
To sit *down*	A'noho.
To sit *cross-legged*	Tee'py.
Six	A'Honoo.
A Skate-fish	E'whaee.
The Skin	Ee'ree.
The Sky	E'raee.
To sleep	Möe.
The long Sleep, *or death*	Möe röa.
To sleep, *when sitting*	Too'roore,möe.
A Sling	E'ma.
Slow	Marra,marröa, s. Fata.
Small, *little*	Eete.
The sense of Smelling	Fata'too, s. Ootoo,-too.
Smell *it*	Hoina.
To smell	Ahe'oi.
Smoke	E'oora.
Smooth	Pa'ya.
Smutting *the face with charcoal for funeral ceremonies*	Bap'para.
A sea Snake, *that has alternate rings of a white and black colour*	Poohee'aroo.
To snatch *a thing hastily*	E'hairoo.
Sneezing	Machee'ai.
Snipe, *a bird resembling a snipe, of a black and brown colour*	Tee'tee.
Snot	'Hoope.

Soberness, *sobriety, sober, not given to drunkenness* - - - Teireida.
To soften - - - - Eparoo'paroo.
Softness, *that is not hard* - - Maroo.
The Sole *of the foot* - - - Tapoo'y.
A Son - - - - My'de.
A Son-*in-law* - - - Hoo'nöa.
A Song - - - - Heeva.
A Sore, *or ulcer* - - - O'pai.
Soreness, *or pain* - - - Ma'may.
Sound, *any sound that strikes the ear* - Pa'eena.
A Span - - - - Ewhäe'ono.
To speak - - - - Paraqu.
Speak; *he speaks not from the heart, his words are only on his lips* - - Neeate *ootoo* te parou no nona.
A Spear, *or lance* - - - Täo.
To spill - - - - Emare.
To spit - - - - Too'tooa.
To spread, *or to expand a thing, as cloth &c.* - - - - Hoho'ra.
To squeeze *or press hard* - - Ne-neee.
To squeeze *or press gently with the hand* - Roro'mee.
Squint-*eyed.* - - - Matta'areva.
A fighting Stage *in a boat* - - E'tootee.
To stamp *with the feet, to trample on a thing* - - - - - Tata'hy.
Stand *up* - - - - Atëarenona.
A Star - - - - E'faitoo, s. Hwettoo.
A Star-fish - - - - Eve'ree.
To startle, *as when one dreams* - Wa'hee,te'dirre.
Stay, *or wait a little* - - - A'reea, s. Aree'ana.
To steal - - - - 'Woreedo.
Steep, *as steep rocks or cliffs* - - Mato.
A walking Stick - - - Tame.
Stinking, *ill smelled, as stinking water, &c.* Na'mooa, s. Nee'neeo.
Stink, *to stink or smell ill* - - Fou, fou.
To stink, *as excrement* - - Peero, peero.
The Stomach - - - 'Paraee'ä.
A Stone - - - - Owhay.
A polished Stone, *used to beat victuals into a paste* - - - Pai noo.
Stones, *upright stones, which stand on the paved area before huts* - - Too'toore.

A small Stool *to lay the head on when asleep* - - - - Papa, s. Papa,*rooä*.
Stool, *to go to stool* - - - Te*etee*'o.
To stop - - - - A'too.
The Stopper *of a quiver* - - Ponau.
A Storm *of wind, rain, thunder, &c.* - Tarooa.
Strait, *narrow, not wide* - - Pe*e*re,peere.
Striking, *hollow striking in dancing* - Ap*ee*.
The String *of a quiver* - - E'aha.
Strong, *as a strong man* - - O'*o*mara.
Stuck - - - - A'boo*la*.
Stupidity, *ignorance* - - - W*ee*a'*l*a.
To suck *as a child* - - - Ote,ote.
Sugar *cane* - - - - E'To, s. Töo.
Suïcide - - - - Euha'a*ou*.
Sultry, *or hot air* - - - Pohe*e'ā*.
The Sun - - - - Mahanna, s. Era.
The meridian Sun - - - Te*i*'n*ee*a te Mahanna.
Supine, *lying* - - - Fateeraha.
Surf *of the sea* - - - Horo'*wai*.
An interjection of Surprise, *or admiration* - - - - Allaheuee'*ai*.
To surround - - - A'b*oo*ne.
To swallow, - - - - Horo'm*ee*.
The Sweat *of the body, or to sweat,* - E'h*ou*, s. Eh*ou* h*ou*.
A sweet *taste* - - - Mona.
Swell *of the sea* - - - E'r*oo*.

T

A Tail - - - - Ero.
A Tail *of a bird* - - - E'hoppe.
To take *a friend by the hand* - - Etoo'ya*oo*.
To take *off, or unloose* - - Eve'vette.
To take *care of the victuals* - - Ewhaapoo te maa.
To talk, *or converse* - - - Paraou.
The sense of Tasting - - - Tama'ta.
A Tetotum, *or whirligig* - - E'piöra.
To tear *a thing* - - - Ha'hy, s. Whatte.
A Teat, *or dug* - - - E'*oo*.
The Teeth - - - - E'n*ee*h*ee*o.
Ten - - - - - A'h*oo*r*oo*.

To tend, *or feed hogs*	Ewhaee te Böa.
Tenants,	Afeu'hau.
A black Tern, *with a whitish head*	Oee'o.
There	Te'raee.
They, *them, or theirs*	To'taooa.
Thickness, *applied to solid bodies*	M-oo'meoo.
Thick, *as thick cloth, &c.*	Tooe,too'e.
Thick, *muddy*	Eworer'oo, s. E'worepo.
Thine, *it is yours, or belongs to you*	No öe.
Thirst	W'aheee'y.
Thoughts	Paraou, no te o'poo.
An appearance of thoughtfulness	Fate'booa.
Three	Toroo.
The Throat	Ara'poa.
To throw, *or heave a thing*	Taora.
To throw *a thing away*	Harre'wai.
To throw *a ball*	Ama'hooa.
To throw *a lance*	Evara'towha.
Throw, *shall I throw it*	Taure'a'a.
Throwing *in dancing*	Hoe'aire.
The Thumb	E'reema,erahai.
Thunder	Pa'teere.
Tickle, *to tickle a person*	My'neena.
A Tide, *or current*	A'ow.
To tie a *knot*	Ty.
Time, *a space of time, from* 6 *to* 10 *at night*	O'tooe,tee'po.
Time, *a little time, a small space*	Popo'eunoo.
Time, *a long time, a great while*	Ta'moo.
A Title *belonging to a woman of rank*	E'tapay'roo.
A Toe *of the foot*	Ma'neeo.
A Tom	Too,pap'pou.
The Tongue	E'rero.
A Tortoise	E'honoo.
Touching	Fa'fa.
Tough, *as tough meat, &c.*	Ahoo'oue.
A Town	E'farre pootoo pootoo.
To trample *with the foot*	Tata'he, s. Ta'ta'hy.
A Tree	E'räo.
A Tree, *from which they make clubs, spears, &c.*	Töa (Eräo.
To tremble, *or shudder with cold*	Oo'atitte, s. Eta.
Trembling, *shaking*	Aou'dou.

To trip *up one in wrestling* - - Me'häe.
A Tropic-bird - - - Manoo'röa.
Truth - - - - Evaee'röa, s. Paraou, mou.
To tumble - - - - Pouta'heite.
A Turban - - - E'täe.
To turn, *or turned* - - - Ooä'höe.
To turn *about, as in walking backwards and forwards* - - - Hoodeepeepe.
Twins, *twin children* - - - Ma'hëa.
To twist *a rope* - - - Tawee'ree.
Two - - - - E'Rooä.

U

An Ulcer, *or sore* - - - O'pai.
Under, *below, low down* - - Oraro.
Under *sail* - - - - Pou'pouee.
To understand - - - Ee'te.
To undress, *or take off the clothes* - Ta'turra.
An unmarried *person* - - - Aree'oi.
Unripe, *as unripe fruit, &c.* - - Poo.

V

Luminous Vapour - - - - Epao.
Vassal, *or subject* - - - Manna'houna.
Vast - - - - Ara, hai, s. Mai, ara'hai.
The Veins *that run under the skin* - E'woua.
Venus - - - - Tou'rooa.
Vessel, *any hollow vessel, as cups of nuts, &c.* - - - - Ai'boo.
Vessel, *a hollow vessel in which they prepare an inebriating liquor* - - Oo'mutte.
To vomit - - - Eroo'y.

W

Wad, *tow, fibres like hemp* - - Tamou.
Wait, *stay a little* - - - Areeana.
Wake, *awake* - - - Arra arra, s. Era.

To walk *out*	Avou'oia.
To walk *backwards and forwards*	Hooa'peepe.
A Warrior, *soldier, or rather a man-killer*	Taatatöa.
Warmth, *heat*	Mahanna,hanna.
A Wart	Toria.
To wash, *as to wash cloth in water*	Mare.
To watch	E'teäe.
Water	A'vy.
Water-cresses	Patöa.
We, *both of us*	Taooa, s. Aroo'rooa.
A Wedge	Era'hei.
To weep, *or cry*	Ha nöa,a,taee.
Well *recovered, or well escaped*	Wöura, s. woo,-ara.
Well, *it is well, charming, fine*	Pooro'too.
What, *what's that*	E'hara, E'ha'rya, s. Ye'haeea, *expressed inquisitively.*
What *do you call that, what is the name of it*	Owy te aee'oa.
When, *at what time*	W'hëëa.
Where *is it*	Te'hëa.
Whet, *to whet or sharp a thing*	E'voee.
To whistle	Ma'poo.
Whistling, *a method of whistling to call the people to meals*	Epou,maa.
To whisper *secretly, as in backbiting, &c.*	Ohe'moo.
Who *is that, what is he called*	Owy,tanna, s. Owy,nana.
Whole, *the whole, not a part of a thing*	E'ta,e'tea, s. A'maoo.
Wide, *not strait or narrow*	Whatta,whatta.
A Widow	Watooneea.
Wife, *my wife*	Ma'heine.
The Wind	Mattay.
The south-east Wind	Mattaee.
A Window	Ma'laee ou'panee.
The Wing *of a bird*	Ere'ou.
To wink	E'amou,amoo.
To wipe *a thing clean*	Ho'roee.
Whish, *a whish to one who sneezes*	Eva'roua t Eatooa.
Within *side*	Tee'ro to.
A Woman	Wa'heine.
A married Woman	Wa'heine mou.

Woman, *she is a married woman, she has got another husband*	Terra, tanne.
Won't, *I won't do it*	'Aeeoo, *expressed angrily.*
Wood *of any kind*	E'raö.
A Wound	Oö'tee.
A Wrestler	Mouna.
Wrinkled *in the face*	Meeo, meeo.
The Wrist	Mo'möa.
A Wry-neck	Na'na.

Y

To yawn	Ha'mamma.
Yellow *colour*	He'appa.
Yes	Ay, s. *ai.*
Yesterday	Ninna'hay.
Yesternight	Ere'po.
York *island*	*Ei'*mēo.
You	Oë.
Young, *as a young animal of any kind*	Pee'naia.

END OF THE FOURTH VOLUME.

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Printers-Street, London.

A TABLE *, exhibitin

English.	*Otal*
A Bird, -	† 'Manoo,
A Bow, -	E'fanna,
Bread-fruit,	*Ooroo,*
A Canoe, -	E'vāa,
Cloth, -	'Ahoo,
A Cocoa-nut,	'Aree,
To drink, -	'Aynoo,
The Eye, -	Matta,
The Ear, -	Ta'reea,
Fish, -	'Eya,
A Fowl, -	Mŏa,
The Hand, -	E'reema,
The Head, -	*Oo'po,*
A Hog, -	'Bŭa,
I, myself, -	Wou, s. ou
To laugh, -	'Atta,
A Man, -	'Tāata,
The Navel, -	'Peeto,
No, -	1'Aym, 2
Plantains, -	'Maiya,
Puncturation,	Ta'tou,
Rain, -	E'ooa,
Sugar-cane, -	E'To,
The Teeth, -	E'neeheec
Water, -	A'vay,
To whistle, -	'Mapoo,
A Woman, -	Wa'hein
Yams, -	E'oohe,
Yes, -	*Ai,*
You, -	Oë,
One, -	A'Taha
Two, -	E'Rooa
Three, -	'Toroo,
Four, -	A'Haa
Five, -	E'Ree
Six, -	A'ono,
Seven, -	A'He
Eight, -	A'wa
Nine, -	A'eev
Ten, -	A'hoo

* It may be easily
is upwards of fifteen
Marquesas Isles, or
Tanna, you never lo
represented in writi
however, be observe
Tanna, both signify
duced, is hard to d
consonant to the ge
monly called Gan,

† The letters in
laid there: if over
syllables repeated,

DLC 8 1966